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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                     Sequence 11 from patent US
AR159551
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patent: WO 0166800-A 1424 13-SEP-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH
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Cargill, M., Ireland, L.S. and Lander, E.S.
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Tsuji,S. and Sanpei,K.
Method for diagnosing spinocerebellar ataxia type 2 and primers
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Tsuji,S. and Sanpei,K.
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Sequence 14 from Patent WO0063373.
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A method of altering the properties of a membrane-associated in by substitution of the transmembrane domain Patent: WO 0063373-A 14 26-CCT-2000; CELLTECH THERAPEUTICS LIMITED (GB)
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/db_xref="taxon:32630"
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              Batzer, M.A., Rul
Leeflang, E.P., and Schmid, C.W.
                                                                                             Arcot, S.S., Wang, Z., W
Alu repeats: a source
Genomics 29 (1), 136-1
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173148
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Hoppens,C.L. and Deininger,P.L.
Structure and variability of recently inserted Alu fa
Nucleic Acids Res. 18 (23), 6793-6798 (1990)
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Arcot, S.S., Deininger, P.L.
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U18443
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Reyes, G.R., Tam, A.W. and Yarbough, P.
Reyestitis E virus peptides and metho
Patent: US 5686239-A 10 11-NOV-1997;
                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Pan.
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tzer,M.A., Rubin,C.M., Heeflang,E.P., Stern,J.D.,
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46 c 29 g
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6-144 (1995)
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BASE COUNT ORIGIN

16

/note="biofilm-dependent regulatory element; when grown as a biofilm on a solid surface" $35\ c$ $35\ g$ $11\ t$

up-regulated

misc_feature

/organism="Pseudomonas /strain="PAOI" /db_xref="taxon:287" /clone="570"

aeruginosa"

Query Match Best Local Similarity

0.5%;

Score 27.6; DB 1; Pred. No. 7.1e+05;

Length

Matches

Conservative

0;

Mismatches

Indels

0;

Gaps

0;

2745 CATCTCCACCGACGCCTCGCGCCGCTCCAGCGAAGCCAGAGCGACGGCCTGCCCAG

CATCGTCGACGAAGCCCACCGGCGCGCGTCGAGGTGCGCGTCGACGACGCCGAGGGCGG 63

REFERENCE AUTHORS TITLE

JOURNAL

Unpublished

(bases 1 to 97)

biofilm-dependent regulatory

elements

novel and

diverse

group

Weyers, J.B., van Zyl, W.H. and Brozel, V.S. Pseudomonas aeruginosa contains a novel a

JOURNAL

Weyers,J.B. and Brozel,V.S.

Direct Submission
Submitted (11-JAW-2000) MIcrobiology and Plant Pathology,
University of Pretoria, Lunnon Road, Pretoria, Gauteng OC
Africa

0002,

FEATURES

Location/Qualifiers

source

REFERENCE AUTHORS TITLE

Pseudomonas

(bases

1 to 97)

Bacteria; Proteobacteria; Pseudomonas aeruginosa

gamma

subdivision;

Pseudomonadaceae;

KEYWORDS SOURCE ORGANISM

Pseudomonas

ACCESSION VERSION

element. AF223423

DEFINITION

Pseudomonas

aeruginosa

clone

bp DNA linear BCT 29-MA:
570 biofilm-dependent regulatory

BCT 29-MAR-2000

97

RESULT 9 AR170415

DEFINITION

Sequence 12 AR170415 AR170415.1

from

patent

US

6291641

linear

PAT

17-DEC-2001

AR170415

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2805

CCTGCTCAGCCTCACGCCCGCC 2826

4

Вb

64

CCTGTTCACCCTGACCCAGGGC

85

SOURCE ACCESSION VERSION

Unknown Unknown

Unclassified.

ORGANISM

KEYWORDS

REFERENCE

1 (bases 1 to 99)
Fuerst,T.R., McAtee,C.Patrick., Yarbough,P.O.

Hepatitis E virus antigens and uses Patent: US 6291641-A 12 18-SEP-2001;

uses therefor

and

Location/Qualifiers

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3031 CAGCCGCACGATGCGCTGGGCCACGGCGTGAGGGCGAGCCAGCGACCCGGTGCGGACAGGC 3090

ORIGIN

Query Match Best Local

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Local Similarity hes 52; Conserv

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Score 27.4; DB 6; Pred. No. 7.8e+05; 0; Mismatches 41;

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BASE COUNT

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/organism="unknown" 46 c 29 g

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FEATURES

AUTHORS TITLE JOURNAL

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Mismatches

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Score 27; DB 5; Pred. No. 9.3e+05;

Length 93;

sig_peptide BASE COUNT

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/db_xref="GI:3930143"
/translation="MEFLPGGAALLQLLLLLLLLLLLSIGRCCST"
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Schartl,M., Wilde,B. and Hornung,U.
Triplet repeat variability in the signal peptide sequence
Mark receptor tyrosine kinase gene in Xiphophorus fish
Gene 224 (1-2), 17-21 (1998)
99132631
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                                                                                                                                                                                                                                                                                                                                                                                                       Xiphophorus maculatus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Meopterygii; Teleostei; Euteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha; Acanthopterygii; Yercomorpha; Atherinomorpha; Cyprinodontiformes; Poeciliidae; Xiphophorus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Xiphophorus maculatus melanoma
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                                                                                                                                                                                  Submitted (20-DEC-1996) Physiol. Chemistry I, Univ. Wuerzburg, Biocenternter, Am Hubland, Wuerzburg 97074, Germany
                                                                                                                                                                                                                        2 (bases 1 to 93)
Schartl,M., Wilde,B. and Hornung,U.
Direct Submission
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Direct Submission
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808, Livermore, CA 94551, USA
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59. .65
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/cell_type="Ad 12-SV40 transformed skin cells"
/clone_lib="PCR product cloned into plasmid vector pCRII"
                                                                                         /organism="Xiphophorus maculatus"
/strain="Rio Papaloapan"
/db_xref="taxon:8083"
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/db_xref="taxon:9598"
/product="melanoma receptor tyrosine kinase"
/protein_id="AAD10119.1"
                                        /codon_start=1
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Pred. No. 8.5e+05;
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Patent: WO 9806830-A 19-FEB-1998;
UNIV SYDNEY (AU) ; WEISS ANTHONY STEVEN (AU)
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UNIV SYDNEY (AU); WEISS ANTHONY STEVEN (AU)
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Weiss, A.S.
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19 c 37 g
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Sequence 13 from Patent W09806830.
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Patent: WO 9806830-A 13 19-FEB-1998;
UNIV SYDNEY (AU); WEISS ANTHONY STEVEN
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SYDNEY (AU); WEISS ANTHONY
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2476308
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1 (bases 1 to 82)

1 (cregory, S., Kettleborough, R., Langford, C., Ross, M.T. and Hunt, S.E. Direct Submission
                                                                                                                                                                                                                        Papandrikopoulou, A., Frey, A. and Gassen, H.G. Cloning and expression of gamma-glutamyl traisolated porcine brain capillaries Eur. J. Blochem. 183 (3), 693-698 (1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H.sapiens flow-sorted chromosome 1 HindIII fragment, SClpE06C12, sequence tagged site. AL009338 \,
                                                                                                                                                                                                                                                                                                                        Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                        SSGGRTPI 88 bp S. scrofa DNA for gamma-glutamyl
                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                gamma-glutamyl transpeptidase.
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                                                                                                                                                                                    See X55020 for continued cds
                                                                                                                                                                                                                                                                                                                                     Sus scrofa.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vector: pBSIISK+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (03-DEC-1997) E-mail contact: humquery@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AL009338.1 GI:2664501
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            13
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                                                                                                                                                                                                                                                                                                                                                              GI:1954
            /translation="MKKRYLLLALAAVALVLL"
32 c 24 g 19 t
                                     /product="gamma-glutamyltranspeptidase"
/protein_id="CAA34536.1"
/db_xref="G1:602909"
/db_xref="SWISS-PROT:P20735"
                                                                                                        /EC_number="2.3.2.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /dev_stage="adult"
20 c 20 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="EBV lymphoblastoid
/clone_lib="SClpE"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="SC1pE06C12"
/sex="Female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:9606'
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                          /codon_start=
                                                                                                                               /db_xref="taxon:9823"
                                                                                                                                                                         Location/Qualifiers
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                                                                                                                                             organism="Sus scrofa"
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                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata;
Cetartiodactyla; Suina; Suidae;
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Pred. No. 1.1e+06;
0; Mismatches 14;
           g
                                                                                                                                                                                    (mRNA sequence).
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(qd
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Sus.
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Best Local Similarity
             Query Match
Best Local
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                                                                                                           source
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                                                                                                                                                                                                                                                                                                                                                                                                                44;
  1 Similarity
48; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR159550 7
Sequence 10 from patent US
AR159550
                                                                                                                                                         Delss, L.P., Chou, J. and Frenkel, N.
Functional domains within the a sequence involved in the cleavage-packaging of herpes simplex virus DNA
J. Virol. 59 (3), 605-618 (1986)
                                                                                                                                                                                                             Viruses; dsDNA viruses, no RNA stage; Herpesviridae; Alphaherpesvirinae; Simplexvirus.

1 (bases 1 to 100)
                                                                                                                                                                                                                                                    skin cells, clone G-2.
human herpesvirus 1
                                                                                                                                                                                                                                                                                                         M13884
M13884.1 GI:330052
                                                                                                                                                                                                                                                                                                                                 HS1ASA 100 bp DNA linear VRL Human herpes simplex virus type 1 (HSV-1) 'a' sequence,
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Tsuji,S. and Sanpei,K.
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                                                                                                                                  3016323
                                                                                                                                                86281869
                                                                                                                                                                                                                                                                               Human herpes simplex virus type 1 (strain
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39; Conservative
  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
29 c 23 g
                                                                /organism="human herpesvirus 1"
/db_xref="taxon:10298"
7 t
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             0.5%;
57.1%;
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 0;
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Pred. No. 1.2e+06;
""ematches 21;
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Pred. No. 1.1e+06;
0; Mismatches 29;
Score 26.4; DB 14;
Pred. No. 1.2e+06;
0; Mismatches 36;
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R.rattus (Sprague Dawley) glucocorticoid receptor gene,
                                                                                                                                                                                                40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Soudeyns, H., Champagne, P., Holloway, C.L., Silvestri, G.U., Ringuette, N., Samson, J., Lapointe, N. and Sekaly, R.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens partial cds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                   12
                                                                                                                                                                                                                                                                                           /product="T-cell receptor beta chain"
/protein_id="AAF29240.1"
/db_xref="GI:6841774"
                                                                                                                                                                                                                                                                 /translation="QQEDSAVYLCASSLVGYEQYF" 17 \text{ c} 20 \text{ g} 14 \text{ t}
                                                                                                                                                                                                                                                                                                                                    /codon_start=1
                                                                                                                                                                                                                                                                                                                                               /note="V(D)J region"
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                                                                                                                                                                                                                                                                                                                                                                                        /gene="TCRBV6S7"
                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="C45U"
                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
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Pred.
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No. 1.3e+06;
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                   ROD
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Rattus rattus
Eukaryota; Metazoa; Chordata;
Eukaryota; Metazoa; Rodentia;
                                                                                                                                                                                primates
J. Virol. 74 (3), 1132-1139
                                                                                                                                                                                                                             Okamoto,H., Fukuda,M., Tawara,A., Nishizawa,T., Itoh,Y., Hayasaka,I., Tsuda,F., Tanaka,T., Miyakawa,Y. and Mayumi,M. Species-specific TT viruses and cross-species infection in
                                                                                                                                                                                                                                                                                                                                                                     AB032281 99 bp DNA linear v
TT virus DNA, untranslated region, isolate:At-TTV5-I.
AB032281
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (26-NOV-1992) K.L. Gearing,
Karolinska Institute, Novum, Huddinge
                                                                          Submitted (10-SEP-1999) Hiroaki Okamoto, Jichi Medical School, Immunology Division; 3311-1 Yakushiji, Minamikawachi-machi, Kawachi-gun, Tochigi 329-0498, Japan (E-mail:hokamoto@jichi.ac.jp, Tel:81-285-58-7404, Fax:81-285-44-1557)
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x69669
x69669.1 GI:296700
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/clone_lib="PCR products"
/dev_stage="adult"
31 c 26 g 9
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/db_xref="taxon:10117"
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University Hospital, S-14186
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Sequence 13 from Patent W00063373.
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                                                                                                    Finney, H.M. and Lawson, A.D.
A method of altering the properties of a
in by substitution of the transmembrane of
Patent: WO 0063373 A 13 26-CCT-2000;
CELLTECH THERAPEUTICS LIMITED (GB)
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/db_xref="taxon:32630"
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/db_xref="taxon:32644"
/clone="DAN1"
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                                                                           Budarf,M.L., Collins,J., Gong,W., Roe,B., Wang,Z., Bailey,L.C., Sellinger,B., Michaud,D., Driscoll,D.A. and Emanuel,B.S. Cloning a balanced translocation associated with DiGeorge syndrome and identification of a disrupted candidate gene Nat. Genet. 10 (3), 269-278 (1995)
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Sequence 13 from Patent WO0063374.
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GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 170912] from the original journal article. Authors indicate breakpoint at 44\text{-}45.
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S79494
                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                              Homo sapiens DiGeorge syndrome patient.
                                                                                                                                                                                                                                                                  S79494.1
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Lawson, A.D. and Finney, H.M.
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                                                                                                                                                            (bases 1 to 74)
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/db_xref="taxon:32630"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 26; DB 6; Length 86; Pred. No. 1.4e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 26; DB 6;
Pred. No. 1.4e+06;
D; Mismatches 30
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BASE COUNT
ORIGIN
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                      ACCESSION
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Best Local Similarity
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                                                                                                                                                                                                                                      3098 GCCTGGCCTGCCTGTGTGCCGCGCTTCAGCAGCCTCAGCAGCTGCAACCCC
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AX023588
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Patent: WO 0018929-A 28 06-APR-2000;
SMITHKLINE BEECHAM BIOLOG (BE) ; BOL
                                          Hyla chrysoscelis DNA
11D2.
                                                                                 HCH388053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                artificial sequences.

1 (bases 1 to 97)
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AJ388053.1
                    AJ388053
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/note="Unknown"
/codon_start=1
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/note="5' fragment
to breakpoint"
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/db_xref="taxon:32630"
/note="oligonucleotide"
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/db_xref="GI:4262002"
/translation="ILTSSCTFQRDGLQG"
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1. .97
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from Patent WO0018929
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Pred. No. 1.6e+06;
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Pred. No. 1.6e+06;
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RESULT 30
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AUTHORS
TITLE
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  2682 CAGCGAGGCGTC
                                          2622 GGCCTACCTGAGCAGCCGCCGCTCCTCAGGGATCTCGCCCTGCTTCTCCCAGCCGCCGCTC 2681
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                           GGTCCACCTGACCCTCCGCCAGGCCGGCGACGACTTCTCCCCGCCGCCTACCGCCGCCGACTT 62
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Sequence 7
AR021158
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                                                                                                                                                                                              Parasewicz, D.G., Schott, B., Holzmayer, T.A. and Roninson, I.B. BCL2 derived genetic elements associated with sensitivity to chemotherapeutic drugs Patent: US 5789389-A 7 04-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (08-JUN-1999) Krenz J.D., Biological Sciences, Minnesota State University, Department of Biological Sciences, Minnesota State University, Mankato MN 56001, USA
                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                       Unknown.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Krenz, J.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; C
Amphibia; Batrachia;
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/rpt_unit=12. .13
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12. .65
                                                                                                                                          /organism="unknown"
38 c 23 g
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/isolate="11D2"
/db_xref="taxon:30342"
                                                                                                                                                                                   Location/Qualifiers
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                                                                            Score 25.6; D. Pred. No. 1.7e. 0; Mismatches
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5789389.
                                                                            25.6; DB 6;
No. 1.7e+06;
Lsmatches 29;
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1.7e+06;
hes 34;
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                                                                                                                                                                                                                                                                                99 bp
Sequence 22 from Patent W09952939.
AX015181
                                                                                                                                                                                                                       Streptococcus pyogenes
Bacteria; Firmicutes; Lactobacillales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified virus having an altered tropism Patent: WO 0208263-A 36 31-JAN-2002; GOT-A- GENE AB (SE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 bp
Ax363260 Patent W00208263
                                                                                                                                                                                         1 (bases 1 to 99)
Bjorck, L.H. and Frick, I.M.
                                                                                                                                                       Patent: WO 9952939-A 22 21-OCT-1999; ACTINOVA LTD (GB); BJORCK LARS HENRIK
                                                                                                                                                                                Peptides
                                                                                                                                                                                                                  Streptococcus.
                                                                                                                                                                                                                                                 Streptococcus pyogenes.
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                                                                                                  /organism="Streptococcus pyogenes"
/db_xref="taxon:1314"
24 c 22 g 14 t
                                                                                                                                             Location/Qualifiers
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/db_xref="taxon:32630"
/note="Primer-S is A, G, or C"
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Pred. No. 1.7e+06;
17; Mismatches 52;
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U21945
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Alternative mRNA splicing and differential promoter utilization determine tissue-specific expression of the apolipoprotein B mRNA-editing protein (Apobecl) gene in mice. Structure and evolution of Apobecl and related nucleoside/nucleotide deaminase apolicy. Chem. 270 (22), 13042-13056 (1995)
                                                      Hepatitis C virus.
Hepatitis C virus
                                                                                                             Sequence 23 from Patent W00183736. AX320853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (28-FEB-1995) Makoto Nakamuta, Baylor College Medicine, One Baylor Plaza, Houston, TX 77030, USA
                                                                                                AX320853.1 GI:17902404
                                                                                                                                         AX320853
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Pellerin, C. and Kukolj, G.
                           Hepacivirus.
                                       Viruses; ssRNA positive-strand
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Arabidopsis thaliana
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 94)

Kleim, J.P., Sibenhorn, G., Heitsch, H. and Riess, G.
Novel angiotensin receptor, production and use thereof Patent: WO 9964585-A 3 16-DEC-1999;
KLEIM JOERG PETER (DE); SIBENHORN GERTRUD (DE); HEITSCH HOLGER (DE); RIESS GUENTHER (DE); HOECHST MARION ROUSSEL DE GMBH (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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                                                                 tagged site.
AL841018
AL841018.1 GI:21911912
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48; Conserv
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BOEHRINGER INGELHEIM (CANADA) LTD. (CA)
                                                                                                        Arabidopsis thaliana transposon
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                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/db_xref="taxon:9606"
24 c 14 g 2
                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Hepatitis C virus"
/db_xref="taxon:11103"
7 c 2 g 82 t
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57.7%;
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93
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                                                                                                                                                                                                                                                                                          33;
                                                                                                        linear STS 17-JUL-200
STS SM_3.28438, sequence
                                                                                                                                                                                                                                                                                                                  Length 94;
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0; Gaps 0; 4-00
CCTAACTG 4920
1 1 1
TTTTCCTT 67
PAT 06-SEP-20003092 on 092
PAT 06-SEP-200052003092
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COpied from PCIUS2003092
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REFERENCE AUTHORS

JOURNAL REFERENCE AUTHORS TITLE

COMMENT

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Copied from PCTUS2003092 on 04-03-2004

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Local Similarity hes 45; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                     AF235063
AF235063.1
                                                                                                                                                                                                                   Wines,M.E., Tiffany,A.M. and Holdener,B.C. Physical localization of the mouse aryl hydrocarbon receptor nuclear translocator-2 (Arnt2) gene within the cl12K deletion Genomics 51 (2), 223-232 (1998) 98390185
                                            This sequence is from the distal (T3) subclone from the Sp6 end of Research is at the 5' end of the Arnt2 gene.
                                                                                                                                               Wines, M.E.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single line, ET an enhancer trap dissociation transposon, GT a gene trap dissociation transposon, MT a mis-expression enhancer trap dissociation transposon, SM a defective suppressor mutator transposon. 3 denotes a sequence derived from the 3'end of the transposon, 5 denotes a sequence derived from the 5'end of the transposon BBSRC GARNet, ATIS project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (15-JUL-2002) Clarke J.H., John Innes Centre, Colr Lane, Norwich, NR4 7UJ, UK
AT denotes an activation tag dissociation transposon within
                                                                                                              Submitted (16-FEB-2000) Biochemistry and Cell Biology, SUNY at Stony Brook, 345 Life Sciences Bldg., Stony Brook, NY 11794-5215,
                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; F
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                    Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       AF235063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         On-line seed stock requests: http://nasc.nott.ac.uk/ NASC stock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
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/organism="Mus musculus"
                             Location/Qualifiers
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8 c 56 g 21 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /variety="Landsberg e
/db_xref="taxon:3702"
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57.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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Genetics BAC 174A19. Sequence
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                                                                                                                                                                                                                                                                                                                    Murinae;
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AX039308/c
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AUTHORS
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Best Local S
Matches 25
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TITLE
JOURNAL
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            synthetic
synthetic
                                                          AX039308
Sequence 9 from Patent I
AX039308
AX039308.1 GI:11229413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission Submitted (04-0CT-1999) Surgery, Cedars Sinai Medical Center, Beverly Blud., Los Angeles, CA 90048, US Related entry: M57609.
                                                                                                                                                                                                                                                                   . Similarity
25; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Palm,K., Salin-Nordstrom,T., Levesque,M.F. and Neuman,T. Fetal and adult human CNS stem cells have similar molecular characteristics and developmental potential Brain Res. Mol. Brain Res. 78 (1-2), 192-195 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens DNA-binding protein AJ270365
AJ270365.1 GI:9557940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Palm, K.
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<1. .>100
                                                                                                                                                                                                                                                                                                                                                   /note="PCR sense
8 c 6
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/db_xref="taxon:9606"
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51 c 32 g 12 t
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/db_xref="taxon:10090"
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             construct
                           construct.
                                                                                               98 bp from Patent W00063373
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RESULT 37 AF235063/c

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Matches Best Query Match

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AX039517/c
Search completed: December 11, 2002, 05:01:57 Job time: 8401 secs
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Matches 43
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Matches 43; Conservat
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                                                      2628 CCTGAGCAGCCGC 2640
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25 CAGGAGCAGCAGC 13
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M synthetic construct
artificial sequences.

1 (bases 1 to 98)

1 (bases 1 to 98)

Lawson, A. D. and Finney, H.M.
Synthetic transmembrane components
Synthetic transmembrane components
CELLTECH THERAPEUTICS LIMITED (GB)
LOCATION/Qualifiers
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Finney,H.M. and Lawson,A.D.
A method of altering the properties of a membrane-associated prote in by substitution of the transmembrane domain
Patent: WO 0063373-A 9 26-OCT-2000;
CELLTECH THERAPEUTICS LIMITED (GB)
Location/Qualifiers
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Sequence 9 from Patent WO0063374.
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Title: Perfect score:

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28-JUL-2000; 2000US-221607P.
02-MAY-2001; 2001US-287724P.
                                                     07-FEB-2002.
                                                                  WO200210449-A2
                                                                                             splice variant; transcriptome; oligonucleotide library; ss.
                                                                                                                               15-JUL-2002
                                                                                                                                                           ABN34264 standard; DNA; 60 BP.
                                        20-JUL-2001; 2001WO-IB01903
                                                                                                    Human; mouse; rat; splice transcript; detection; RNA transcript;
                                                                                                                  Human spliced transcript detection oligonucleotide SEQ ID NO:7012
      (COMP-) COMPUGEN INC
                                                                                Homo sapiens.
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                                                                                                                                                                                                                                                  Sequence 60 BP; 17 A; 16 C; 14 G; 13 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                           messenger RNAs that populate a (sub-)transcriptome, where the (sub-)transcriptome comprises messenger RNAs transcribed from
                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; SEQ ID 7012; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     developmental-specific genes
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       (COMP-) COMPUGEN INC
                   28-JUL-2000;
02-MAY-2001;
                                       20-JUL-2001;
                                                      07-FEB-2002.
                                                                   WO200210449-A2
                                                                                 Mus musculus.
                                                                                             splice variant; transcriptome; oligonucleotide library; ss
                                                                                                                                15-JUL-2002
                                                                                                                                             ABN52341;
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CC the genome, which encodes one or more messenger RNA splice variants. Or the oligonucleotide libraries are useful for detecting mRNAs from a complete stample, in expression profiling studies, in qualitatively or quantitatively characterising the corresponding transcriptome, and in complete complete complete corresponding transcriptome as speciallised minical condition of tissue and spathological state, and so allowing the condition; to detect developmental specific genes such as those genes conly expressed in specific tissue under a specific pathological condition; to detect developmental specific genes; and to detect RNA cranscripts and splice variants of a transcriptome of a patient suffering condition; to detect developmental specific genes; and to detect RNA cranscripts and splice variants of a transcriptome of a patient suffering condition. ABN2723 to ABN59589 represent colligonucleotide sequences from rats, humans and mice, which are used in the exemplification of the present invention.

2. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO cat fifty.
                                                                                                                                                                                                                                                                                                                                                                          4479 AAACTCTGAGTTACTTTCCCCAGGTGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGA 4538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            set of messenger RNAs transcribed from a given transcription unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                transcription units that populate a genome. The library comprises several oligonucleotides, each capable of hybridising selectively
Human; mouse; rat; splice transcript; detection; RNA transcript;
                                               Mouse spliced transcript detection oligonucleotide SEQ ID NO:25089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes oligonucleotide libraries for detecting
                                                                                                                                                                                                                                                                                                                                                    AAACTCTGAGTTACTTTCCCCCAGGTGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.0006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copied from PCTUS2003092 on 04-03-2004
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Score 60; Pred. No.

WPI;

set

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the genome, which encodes one or more messenger RNA splice variants.

The oligonucleotide libraries are useful for detecting mRNAs from a blological sample, in expression profiling studies, in qualitatively or quantitatively characterising the corresponding transcriptome, and in cdetecting RNA transcripts and splice variants of human or animal ctranscripts and splice variants of human or animal ctranscripts and splice variants of human or animal contraines to detect transcripts of a sub-transcriptome under a particular biological or pathological state, and so allowing the condition, to detect developmental specific pathological condition; to detect developmental specific genes such as those genes condition; to detect developmental specific genes; and to detect RNA ctranscripts and splice variants of a transcriptome of a patient suffering condition; to detect developmental specific genes; and to detect RNA ctranscripts and splice variants of a transcriptome of a patient suffering coligonucleotide sequences from rats, humans and mice, which are used in the exemplification of the present invention.

CC N.B. The sequence data for this patent did not form part of the printed confidence of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New oligonucleotide libraries comprising oligonucleotides which selectively hybridize to mRNAs transcribed from a transcription unit of a genome, useful for detecting tissue-, pathology-, and
                           WO200166800-A2
                                                                                                                                                                                                                                                                                                               Human-single nucleotide polymorphism (SNP) GLI3 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI30935 standard; DNA; 31 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4802 TTAGG 4806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4742 AGTTCTTTGCTGACCTCCCTAGCGGAAGAAAGAAATTCCTTGCAGTTATGCAATAGGCT 4801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          transcription units that populate a genome. The library comprises several oligonucleotides, each capable of hybridising selectively
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        messenger RNAs that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; SEQ ID 25089; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          developmental-specific genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (sub-)transcriptome comprises messenger RNAs transcribed from multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of messenger RNAs transcribed from a given transcription unit of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention describes oligonucleotide libraries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTTCTTTGCTGACCTCCCTTGCAGAAGAAAGCAAGTTCCTTGCAGTTATGCAGTAGGCG 60
                                                                                                                                                                                                                                        resequence; genotype; disease; forensic; paternity testing; nucleotide polymorphism; SNP; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wasserman
                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                            Location/Qualifiers replace(16,C)
                                                                      /standard_name= "single nucleotide polymorphism"
                                                                                                  /*taq=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       populate a (sub-)transcriptome, where the
                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.1%; 90.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             each capable of hybridising selectively to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mintz
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Pred. No. 0.0066;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65;
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                                                                                                                                                                                                                                                                                                                 AAI30936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to the identification of nucleic acid molecules (AAI29513-AAI31314) from the human genome which include polymorphic sites which can predispose individuals to disease. Various genes from a number of individuals were resequenced and single nucleotide polymorphisms (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype -
                                                                                                                                                       07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAR-2000;
22-MAY-2000;
Cargill M,
                                                                                          07-MAR-2000;
22-MAY-2000;
                                                                                                                                                                                                                 13-SEP-2001.
                                                                                                                                                                                                                                                                 WO200166800-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human single nucleotide polymorphism (SNP) GLI3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI30936;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI30936 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2865 AGGAGGCCGCCGCCGACGCCCTGCCCAAC 2895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           testing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 117; 145pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAR-2001; 2001WO-US07268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                             (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                 Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                              1 AGGAGGGCCGCCGCCGACGCCCCTGCCCAAC 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            resequence; genotype; disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 5 A; 15 C; 10 G; 1 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ireland
Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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2000US-0206129.
                                                                                          2000US-0187510
2000US-0206129
                                                                                                                                                                 ,2001WO-US07268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers replace(16,C)
/*tag= a
                                                                                                                                                                                                                                                                                                               /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31
Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            forensic; paternity testing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .5e+03;
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Gaps

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ARISULT 3
AAIJOS ID AAI3
XX AAI3
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18-OCT-2001 AAI30935;

Homo single Human;

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Matches Query Match

Local

Sequence 65

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61

GTAGG 65

Query Match Best Local : Matches

Local Similarity

0.6%;

Score 29.6; DB 19 Pred. No. 4.4e+03 Mismatches

DB 19;

Length

78;

19;

Indels

0;

Gaps

0;

Copied from PCTUS2003092 on 04-03-2004

Conservative

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RESULT 5
AAV17231
ID AAV1
XX AAV1
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AC AAV1
XX SCA:
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Best Local :
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number of C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity testing.
                                      une method of the invention for diagnosing spinocerebellar ataxis ty II, by performing PCR on the test DNA using two primers hybridising parts of the SCA2 gene sequence, and determining the number of CAG repeats in the amplified products. The method provides an easy means the diagnosis of spinocerebellar ataxis type TT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to the identification of nucleic acid molecules (AAI29513-AAI31314) from the human genome which include polymorphic s: which can predispose individuals to disease. Various genes from a numl of individuals were resequenced and single nucleotide polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 117; 145pp; English.
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                                                                                                                                            This sequence represents a fragment of the SCA2 gene. the method of the invention for diagnosing spinocerebe
                                                                                                                                                                                                                          Disclosure; Page 13; 23pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                        Sanpei K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JAN-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCA2 gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SCA2 gene CAG repeat unit fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV17231;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV17231 standard;
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                                                                                                                                                                                                                                                                                                                                                      1998-120796/11.
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                                                                                                                                                                                                                                                                              g spinocerebellar ataxis type CAG repeat units
                                                                                                                                                                                                                                                                                                                                                                                                        Tsuji S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         spinocerebellar ataxis type II;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L
W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 31; DB; Pred. No. 1.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3062
                                                                                                                                                                                                                                                                                                     II -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .5e+03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22;
                                                                                                                                                                                                                                                                                                     bу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                     PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 31;
                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                     determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR
                                                                        easy means for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                           be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                 type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sites
                                                                                                                          6
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Sequence 78

BP;

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other;

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RESULT 6
AAV17234
Вb
                                                                                                                                                       Qy
                                                                                                                                                                                                             AAV17232
                                                                                                           RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                         Matches
                                                                                                                                                                                          Query Match
               SCA2 gene;
                                   SCA2
                                                                      AAV17232;
                                                                                                                                                     2586 CAACAGAAGGGACAGCAGCCAGCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTC 2645
                                                                                                                                                                                                                                                                                            Disclosure; Page 14; 23pp;
                                                                                                                                                                                                                                                                                                               Diagnosing spinocerebellar ataxis type number of CAG repeat units
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCA2 gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2586 CAACAGAAGGGACAGCAGCAGCACCATCAGCTCGGCCTAGCTGAGCAGCCGCCGCTC
                                                     29-JUN-1998
                                                                                        AAV17232 standard; DNA;
                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                II, by performing PCR on the test DNA using two primers hybridising-
parts of the SCA2 gene sequence, and determining the number of CAG
                                                                                                                                                                                                                                                                This sequence represents a fragment of the SCA2 gene. It can be us
the method of the invention for diagnosing spinocerebellar ataxis
                                                                                                                                                                                                                                                                                                                                          WPI; 1998-120796/11
                                                                                                                                                                                                                                                                                                                                                            Sanpei K,
                                                                                                                                                                                                                                                                                                                                                                                                                   18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9803679-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV17234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV17234 standard;
                                                                                                                                                                                                                                         repeats in
                                                                                                                                                                                                                                                                                                                                                                              (SRLS-)
                                                                                                                                                                                                                                                                                                                                                                                               18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                   Local
                                                                                                                                       7
                                                                                                                                                                                                                            ts of the SCA2 gene sequence, and determining the nuests in the amplified products. The method provides diagnosis of spinocerebellar ataxis type II.
                                  gene
                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40;
                                                                                                                                                                                                                                                                                                                                                                              SRL
                                                                                                                                                                                   Similarity
                                                                                                                                                                                                             69
                                   CAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAG
                                                                                                                                                                                                                                                                                                                                                           Tsuji S;
                spinocerebellar ataxis type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        spinocerebellar ataxis type II; CAG repeat; PCR primer;
                                                                                                                                                                                                             BP; 20 A;
                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                     (first
                                  repeat unit fragment.
                                                                                                                                                                                                                                                                                                                                                                                                96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                                                                                   96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                 0.6%;
                                                                                                                                                                                                             27 C;
                                                                                         78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fragment.
                                                                                                                                                                                                                                                                                             Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                      Score 28; DB
Pred. No. 9.7e
0; Mismatches
                                                                                                                                                                                                            22 G; 0 U;
                                                                                                                                                                     e 28; DB 19; ...
No. 9.7e+03;
1. No. 20;
                II;
                                                                                                                                                                                                          0 other;
                                                                                                                                                                                                                                                                                                                        II -
               CAG repeat;
                                                                                                                                                                                                                                                                                                                        Λq
                                                                                                                                                                                                                                                                                                                        PCR
                                                                                                                                                                                        Length 69
                                                                                                                                                                                                                                                                                                                        and
                                                                                                                                                                                                                                       an
                                                                                                                                                                                                                                                                                                                        determining
               PCR primer;
                                                                                                                                                                                                                                       easy
                                                                                                                                                                         0;
                                                                                                                                                                                                                                       means
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                           used
                                                                                                                                                                                                                                                        type
ng to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2645
                                                                                                                                     66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SS.
                                                                                                                                                                                                                                       for
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RESULT 8
AAV17233
                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                WPI;
This sequence represents a fragment of the the method of the invention for diagnosing
                               Disclosure; Page 13-14; 23pp;
                                                  Diagnosing spinocerebellar ataxis type number of CAG repeat units
                                                                                                     Sanpei K,
                                                                                                                                             18-JUL-1996;
                                                                                                                                                                                      29-JAN-1998
                                                                                                                                                                                                          WO9803679-A1
                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                 SCA2 gene; spinocerebellar ataxis type II; CAG repeat;
                                                                                                                                                                                                                                                                      SCA2 gene
                                                                                                                                                                                                                                                                                           29-JUN-1998
                                                                                                                                                                                                                                                                                                                AAV17233;
                                                                                                                                                                                                                                                                                                                                    AAV17233 standard; DNA; 78 BP
                                                                                                                                                                                                                                                                                                                                                                                                          2586 CAACAGAAGGGACAGCAGCCAGCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 78 BP; 23 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeats in the amplified products. The method provides an easy means for the diagnosis of spinocerebellar ataxis type {\tt II.}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               parts of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diagnosing spinocerebellar ataxis type II - number of CAG repeat units
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sanpei K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SRLS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-JAN-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9803679-A1
                                                                                                                                                                 18-JUL-1996;
                                                                                                                        (SRLS-) SRL
                                                                                                                                                                                                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              by performing PCR on the test DNA using two performing PCR on the test DNA determining
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      s sequence represents a fragment of the SCA2 gene. It can be used method of the invention for diagnosing spinocerebellar ataxis type by performing PCR on the test DNA using two primers hybridising to
                                                                                                                                                                                                                                                                                                                                                                                       1998-120796/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-120796/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SRL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                       CAG
                                                                                                    Tsuji S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tsuji S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 13;
                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                      repeat unit fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-JP01999.
                                                                                                                                              96WO-JP01999
                                                                                                                                                                 96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                                                                                                        0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30 C; 25 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 28; DB 19
Pred. No. 1e+04;
                               Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                             II -
                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 19;
          SCA2
 spinocerebellar ataxis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bу
                                                             γd
                                                                                                                                                                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR
                                                             PCR
          gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the number of CAG
                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and determining
                                                             and
          It can be
                                                                                                                                                                                                                                                 PCR primer;
                                                             determining
           used in
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        type
ng to
                                                                                                                                                                                                                                                                                                                                                                                                          2645
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                16-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                            WO200063373-A1.
                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC65409;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC65409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 78
                                                                                                                                                                                      Example
                                                                                                                                                                                                                                                                                                                                                        26-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                    transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40;
                                                                                                                                                                                      2;
 (e.g.
  diabetes)
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B QΥ

or metabolic/idiopathic

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SSSSXX
                                                                                                                                                                                                                                                                                                                                                                                       Altering the properties or level of expression of membrane-associated proteins, e.g., to change responses to cell surface antigens or the sensitivity of intracellular signaling \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                II. by performing PCR on the test DNA using two primers hybridising t parts of the SCA2 gene sequence, and determining the number of CAG repeats in the amplified products. The method provides an easy means the diagnosis of spinocerebellar ataxis type II.
                                    inflammatory/autoimmune disorders (e.g. rheumatoid arthritis, osteoarthritis or inflammatory bowel disease), cancer, allergic/atopic diseases (e.g. asthma or eczema), congenital disorders (e.g. cystic fibrosis or sickle cell anaemia), dermatological disorders (e.g.
                                                                                                                                         surface-associated antigen versus antigen in solution, and the sensitivity of intracellular signaling mediated by membrane-associated proteins can be altered. They can be important in treatment of, e.g. H.
                                                                                                                                                                                                   transmembrane region or a membrane-anchoring region for transmembrane membrane-anchoring regions that are not naturally part of the protein The relative response of membrane-associated proteins to cell
                                                                                                                                                                                                                                                               The present sequence was used in the construction of chimeric receptors. The properties and level of expression of a membrane-associated protein may be altered by substituting a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2586 CAACAGAAGGGACAGCGCCAGCCATCAGCTCGGCCTACCTGAGCAGCCGCCGCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-015774/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-APR-2000; 2000WO-GB01471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   multiple sclerosis; organ transplant rejection; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  eczema; cystic fibrosis; sickle cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antidiabetic; neuroprotective; chimeric receptor;
inflammatory disorder; autoimmune disorder; cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide B6468 for chimeric receptor construction
psoriasis), neurological disorders (e.g. multiple transplant rejection, graft-versus-host diseases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CLLT ) CELLTECH THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Membrane-associated protein; antiviral; antibacterial; antiparasitic;
                                                                                                                      infection, bacterial infections, parasitic infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lmmunomodulatory; anticancer; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                                                                                                   Fig 3; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 23 A; 30 C; 25 G; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99GB-0008816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      anaemia; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cancer; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infection;
                 sclerosis)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            asthma;
                     organ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for
                                                                                                                                                                                                                                              or
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site of a promoter, and not only the recruitment site of the promoter.

The method is used to: (a) identify a zinc finger domain that recognises a target site on a DNA; (b) determine whether a test zinc finger domain recognises a target site on a promoter; (c) generate a nucleic acid that encodes a chimeric zinc finger protein; and (d) identify DNA sequences recognised by zinc finger domains. The method can be used to design novel polypeptides that bind to a specific site on a DNA. The method can facilitate the customised generation of new polypeptides that can regulate the expression a selected target e.g. a gene required by a pathogen can be repressed, a gene required for cancerous growth can be repressed, or a gene poorly expressed or encoding a mutated protein can be activated and overexpressed. The method can be used in vivo which enables identification of polypeptides that bind to a specific site on a DNA in the intracellular milieu. The present sequence represents the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                    The invention relates to a method of identifying a zinc finger domain that recognises a target site on a DNA. The method comprises expressing hybrid nucleic acids with a test zinc finger domain in cells containing reporter construct, where the reporter gene is expressed above a given
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim
                                                                                                                                                                                                                                                                                                                                                                                       Example 49; Page 66; 147pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying a zinc finger domain for e.g. designing new polypeptides that bind to a specific site on a DNA, comprises expressing hybrid nucleic acids with a test zinc finger domain in cells -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-2000; 2000KR-0007730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-FEB-2001; 2001WO-KR00244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zinc finger domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA encoding zinc finger domain TG-ZFD-040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2565 CGTCACTATGCTGAACATGCTCAACAGAAGGGACAGCAGCAGCAGCACCATCAGCTCGGC 2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS13081 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TOOL-) TOOLGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 CGTCACCCAGAACAGCAGGAGCAGTAGCAGGAGCAGCAGGAGCAGCAGGAGCAGGAG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCAGGAGCAGC 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTACCTGAGCAGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001-557644/62.
                                                                                                                                                                                                                                                                                        when a transcription factor recognises a recruitment and a target
                                 sequence of TG-ZFD-040 zinc finger protein which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kwon Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cancer; human;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hwang
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                         liver, oesophagus, brain, testicle, uterus), as potentiating agents. Compositions comprising the polypeptide may be used in the treatment prophylaxis against viral (such as infections caused by HIV (human immunodeficiency virus), hepatitis, influenza, Japanese encephalitis virus, Epstein-Barr virus and respiratory syncytial virus), bacterial (e.g., infections caused by Neisseria, Meningococcal, Haemophilus, Salmonella, Streptococcal, Legionella and Mycobacterium or parasitic (e.g., infections caused by Plasmodium, Schistosoma, Leishmania,
                                                                                                                                                                                                                                                                                                                                        synthetic polynucleotide encoding and a computer system for designing the synthetic polypeptides. The synthetic polypeptides and polynucleotides are referred to as a Savine. The synthetic polypeptide useful for modulating immune responses preferably directed against a pathogen or a cancer, (e.g., cancers of the lung, breast, overy, cervix between the content of th
                                                                                                                                                                                                                                                                                                                   pathogen or a cancer, (e.g., car
colon, head and neck, pancreas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               parent polypeptide to impede, abrogate or otherwise alter at least of function associated with the parent polypeptide and for inducing an immune response against a pathogen or cancer. Also included are a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a new synthetic polypeptide (I) comprising several different segments of at least one parent polypeptide linked together in a different relationship relative to their linkage in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; Fig 27; 364pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New synthetic polypeptides having several different segments of at least one parent polypeptide linked together differently compared the linkage in the parent polypeptide, for inducing immune respons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1496 ACTGCCACTGGGAAGGCTGCGCGAGGGAGTTCGACACCCAAGAGCAGCTTGTGCACCA 1553
                           sequence encodes
                                                    Trypanosoma, Toxoplasma and Giardia) infections. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AUSU ) UNIV AUSTRALIAN NAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAY-2001; 2001WO-AU00622
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         bacterial infection; Salmonella;
Trypanosoma; Toxoplasma; Giardia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Savine; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human DNA encoding MAGE-3 segment 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-MAY-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    viral infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK36865
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002-147575/19.
DB; AAU85045.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGCAACTGGGACGGCTGCGGCTGGAAGTTTGCGCGCTCAGACGAGCTCACGCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           l Similarity
39; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a pathogen or cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000AU-0007761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ramshaw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cancer; viral infection; HIV; hepatitis C virus;
human immunodeficieny virus; melanoma;
                        peptide derived from a parent protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                            prostate, stomach, bladder, kidney,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Legionella; parasitic infection; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .2e+04;
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PR 27-APR
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                               This invention relates to novel i-antigen polypeptide sequences. I-antigens or immobilisation antigens ar common to a variety of hymenostomatid ciliates and their expression varies in response to environmental stimuli. This invention relates to i-antigens in Inthyophthirius multifiliis, a protozoan which is an obligate parasite of freshwater fish causing ichthyophthiriasis or white spot disease. The invention includes two polypeptide and polynucleotide sequences for two i-antigens, of 48 and 55 kD. Also included in the invention are antibodies capable of binding to the nucleotide sequences and a method for identifying I multifiliis serotypes using the nucleotide sequences. A composition (containing the i-antigen nucleotide) capable of eliciting an immune response in fish is useful for prophylaxis, treatment or for controlling I multifiliis infection is fire polylaxis.
                                                                                                                                                                                                                                                                                                                    Novel i-antigen polypeptides and polynucleotides from Ichthyophthirius multifiliis, useful for prophylaxis and treatment of Ichthyophthirius infection in fish \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
vaccines comprising a
                     controlling I.
                                                                                                                                                                                                                                                                                Disclosure; Figure 12; 144pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200046373-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA97078;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA97078 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3196 AATTACACGCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3136 AGCAGCTGCAACCCCCCGGCGATGGCCACGTCCGCGGAGAAGCGCAGTCTCGTGCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (LINT/) LIN T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYGE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immobilisation antigen; i-antigen; ichthyophthiriasis; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CLAR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DICK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGAACAGGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGGACTGGAAGCCAGAGGCGAAGCCCTCGGCCTCGTGGGAGCCCAAGCCCCTGCCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     ŢĠ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      spot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) CORNELL RES FOU
) CLARK T G.
) DICKERSON H W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UNIV GEORGIA RES FOUND INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90
                                                                                                                                                                                                                                                                                                                                                                                                                                     Dickerson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US02962.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                   onse in fish is useful for prophylaxis, treatme multifiliis infection in fish. Polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0122372.
99US-0124905.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0131121.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-0118634.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treshwater
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                                                                                                                                                                                                                                                                                                                                                                                                                                     WH,
portion of the amplified product encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95
                                                                                                                                                                                                                                                                                                                                                                                                                                     Lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                     Τ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 8 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fish; immune response; infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3208.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .3e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
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                   or
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                   protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
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                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HEV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT27118
                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                          P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT27118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GENE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
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               Local
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             Similarity
                                                                          99
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A DNA sequence (AAT27118) codes for a C-terminal fragment (AAR96100), 406.4-2, of a structural protein (see also AAR95098) of hepatitis E virus (HEV) Mexico strain. It can be obtd. from phage lambda gtl1 clone 406.3-2, which includes the HEV Mexico ORP-2 (AAT27108) and ORF-3 (AAT27116). The DNA is inserted into pGEX for expression of 406.4-2 antigen in E. coli. The antigen can be utilised in diagnostic assays of HEV when used in conjunction with 62x antigens (see also AAR96091-92 and AAR96101-04) of HEV capsid protein.
                                                                                                                                                                                                                Disclosure; Page 78; 125pp; English.
                                                                                                                                                                                                                                                           Hepatitis E virus (HEV) antigens dendiagnostic reagents for determining
                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-230608/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis; antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3227 GAAACTTCCACTCGTCCCCTGTCCTCCCAGCATCACCGAGAACGTCACCCTGGAGTCCC 3286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antigenic i-antigen polypeptide obtained is also useful for treating or preventing I. multifiliis infection in fish. Sequences AAA97036-A97042, and AAA97060, AAA97065 and AAA97089 represent i-antigen genes and gene fragments identified in the invention. Sequences AAA97043-A97064 (excluding AAA97060) and AAA97071-A97088 represent primers used in the isolation of the i-antigen gene sequences. Sequences AAB25899-B25889 an AAB25893-B25906 represent i-antigen protein and peptide sequences.
                                                                                                                                                                                                                                                                                                                                                                                                        Fuerst TR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-MAY-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9612807-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis E virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hepatitis E virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              enterically-transmitted non-A/non-B hepatitis virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAAGTCTCAGTGTACCCCTTGTCCTGCTATCAAGCCTGCTAACGTGGCTCAGGCTACCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGACCATGGACGCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENELABS TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                      AAR96100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                                                                        McAtee CP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-0542634.
94US-0327952.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95WO-US13703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Mexico strain) 406.4-2 antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 C;
                                                                                                                                                                                                                                                                                                                                                                                                     Yarbough PO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33 G; 21 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 27.6;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                      derived from
                                                                                                                                                                                                                                                                   VEH
                                                                                                                                                                                                                                                                                                                                                                                                     Zhang
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                                                                                                                                                                                                                                                                infection
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                                                                                                                                                                                                                                                                                                                                                                                                     K
                                                                                                                                                                                                                                                              n ORF 2 -
etion and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
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                                                                                                                                                                                                                                                              useful
in vacc
                                                                                                                                                                                                                                                                vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vaccine;
                                                                                                                                                                                                                                                                                    as
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Copied from PCTUS2003092 on 04-03-2004

BP;

12 A;

46 C; 29 G; 12 T; 0 other;

Conservative

0;

Mismatches

Indels Length

0;

Gaps

0;

99;

.5e+04; DB 17;

0.5%;

Score 27.4; Pred. No. 1

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Copied from PCTUS2003092 on 04-03-2004
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16-JUN-1989;
13-OCT-1989;
05-APR-1990;
                                                              antibodies (Ab). The method comprises: (a) reacting a serum sample will a HEV peptide antigen; and (b) examining the peptide for the presence of bound Ab, where the presence of bound Ab indicates the presence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US5686239-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis E virus; Burma;
antibody; diagnosis; HEV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT96968;
                                                                                                                         Disclosure; Column
                                                                                                                                             Diagnosis of hepatitis E virus Burma and Mexico strain infection by immunoassay with hepatitis E virus peptide antigens
                                                                                                                                                                                                                                                                                                                                     17-JUN-1988;
11-APR-1989;
                                                                                                                                                                                                                                                                                                                                                            09-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                 17-JUN-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hepatitis E virus - Mexico strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT96968 standard; DNA;
Sequence 99
                                 enterically transmitted non-A/non-B viral hepatitis
                                        HEV Ab. The present sequence encodes a specifically claimed HEV peptide antigen. The method can be used to diagnose infection with the
                                                                                                 A method has been developed
                                                                                                                                                                                                               Reyes
                                                                                                                                                                                                                                    (GENE-)
                                                                                                                                                                                                                                                                               17-JAN-1992;
                                                                                                                                                                                                                                                                                            05-APR-1991;
                     specifically the HEV Burma and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCGCCGACCTGCCACAGCCGGGGCTGCGGCGC
                                                                                                                                                                                         1997-558132/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCGAGGGCCTGGCCTGCTGTGCCGCGC
                                                                                                                                                                                                              GR,
                                                                                                                                                                                                                                    GENELABS TECHNOLOGIES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E virus
                                                                                                                                                                                                               Tam AW,
BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                               90US-0505888.
91US-0681078.
92US-0822335.
                                                                                                                                                                                                                                                                                                                 89US-0367486
89US-0420921
                                                                                                                                                                                                                                                                                                                                      88US-0208997.
89US-0336672.
                                                                                                                                                                                                                                                                      92US-0870985
                                                                                                                                                                                                                                                                                                                                                           94US-0240049
                                                                                                                                                                                                                                                                                                                                                                                   88US-0208997
 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product= Peptide_antigen_406.4-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mexico strain peptide antigen 406.4-2 encoding
                                                                                                                        33-34; 36pp;
A; 46 C;
                                                                                                                                                                                                               Yarbough
                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mexico;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                      for detecting hepatitis E virus (HEV) comprises: (a) reacting a serum sample with
29 G; 12 T; 0 other;
                      Mexico strains.
                                                                                                                         English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunoassay;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide antigen;
                                 agent HEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3090
```

Query Match Best Local Matches

52;

Conservative

0;

Mismatches

Indels Length

Gaps

0

Query Match

Sequence 51

BP;

6 Α; 9

w G;

Best Local Similarity

0.5%; C;

Score 26.8; DB 22; Pred. No. 1.6e+04; 33 T; 0 other;

Length 51;

Similarity

0.5%;

Score 27.4 Pred. No.

27.4;

99; 0;

.5e+04; DB 18;

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RESULT 15
AAL28393
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QУ
                                             CC variants of proteins related to amylases, amyloid proteins, anglopietin, apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related comproteins, cytochromes, kinesins, cytokines, interferons, interleukins, correctins, cytochromes, kinesins, cytokines, interferons, interleukins, compresent sequence is composed in the prevention, diagnosis and the peptides encoded cytokine may be used in the prevention, diagnosis and treatment of cytokines associated with inappropriate expression of the proteins listed composed satisfactorial diseases with a genetic component, such as autoimmune cystemic lupus erythromatosus and Grave's disease), inflammation, cancer ce.g. cancers of the bladder, brain, breast, colon and kidney, laukaemia), diseases of the nervous system and an infection of pathogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therapy; vaccine; amylase; can amylaid protein; angiopotetin; apoptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 complement related protein; cytochrome; kinesin; cytokine; interferon; interleukin; G-protein coupled receptor; thioesterase; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAL28393 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3031 CAGCCGCACGATGCGCTGGGCCACGGCGTGAGGAGGGCCCAGCGACCCGGTGCGGACAGGC
                                                                                                                                                                                                                                                                                                                                Claim 1; Page 1839; 4143pp; English.
                                                                                                                                                                                                                                                                                                                                                                       Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymoncogenes and histones, useful for diagnosing and treating, e.g. cancer, autoimmune diseases and infections -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       multifactorial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAL28393;
                                                                                                                                                                                                                                                                                             The present
                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-DEC-1999;
27-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-DEC-2000; 2000WO-US35498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200147944-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nervous system disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCGCCGACCTGCCACAGCCGGGGCTGCGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCGAGGGCCTGGCCTGCCTCGTGCCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCCCGGCCACTTGGCTCCACTTGGCGAGATCAGGCCCAGGCGCCCTTCCGCTGCCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                       2001-465210/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP oligonucleotide #1601.
                                                                                                                                                                                                                                                                                                                                                                  autoimmune diseases
                                                                                                                                                                                                                                                                                                 invention relates to oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0173419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-0173419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51 BP.
                                                                                                                                                                                                                                                                                                                                                                    and infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       infection;
                                     colon and kidney,
colon and kidney,
                                                                                                                                                                                                                                                                                                 encoding
                                                                                                                                                                                                                                                                                                                                                                                                    cyclins, polymerases,
                                                                                                                                                                                                                                                                               polymorphic
, angiopoietin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66
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ARESULF 1
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XX AAL
XX AAL
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XX Imm
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
     Matches
                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4861
                                                                                                                                                                                                                                                                                                                                                                                                                                            variants of proteins related to amylases, amyloid proteins, angiopolet apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related proteins, cytochromes, kinesins, cytokines, interferons, interleukins,
                                                                                                                                                                                                                                                              by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of the proteins listed above. Disorders that may be prevented, diagnosed and/or treated include multifactorial diseases with a genetic component, such as autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
                                                                                                                                                                                                                                                                                                                                                                                             G-protein coupled receptors and thioesterases. The present sequence is one such oligonucleotide. The oligonucleotides and the peptides encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amyloid protein; angiopoietin; apoptosis related protein; cadherin;
cyclin; polymerase; oncogene; histone; kinase; colony stimulating f
complement related protein; cytochrome; kinesin; cytokine; interfer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 1839; 4143pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polymorphic nucleic acids encoding e.g. amylases, oncogenes and histones, useful for diagnosing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-DEC-1999;
27-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200147944-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            multifactorial
                                                                                                           Sequence 51
                                                                                                                                                                                                                                          systemic lupus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer, autoimmune diseases and infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shimkets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-DEC-2000; 2000WO-US35498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interleukin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Immunosuppressive; immunostimulatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human SNP oligonucleotide #1602.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAL28394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAL28394 standard;
                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ш
                                                                                                                                                                                      .g. cancers of the bladder,
ukaemia), diseases of the n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention relates to oligonucleotides encoding polymorphic lants of proteins related to amylases, amyloid proteins, angiopoiet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTGTTTTGGCTGTTTTTTTAGTTCTGTATGTATTTTAGCAATCTC 4906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTTTTTTTTTTTTTTTTTTTTGCATGTGTTTTAACAATCCC 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-465210/50.
  Similarity
34; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   system disease;
                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0173419
2000US-0173419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      elated protein; cytochrome; kinesin; cytokine; interferon;
G-protein coupled receptor; thioesterase; inflammation;
al disease; autoimmune disease; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                     erythromatosus and Grave's disease), inflammation,
                                                                                                        σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antimicrobial; gene therapy; vaccine;
                                                                                                        Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                        0.5%;
                                                                                                        9 C; 3 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВÞ
  0;
                                                                                                                                                                                      nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                        Score 26.8;
Pred. No. 1.
                                                                                                                                                                                                               brain, breast, colon and kidney
                                                                                                      33 T; 0 other;
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                      system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory;
                        .6e+04;
                                              DB 22;
                                                                                                                                                                                      and an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cyclins, polymerases, treating, e.g.
                                                                                                                                                                                      infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
  Indels
                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amylase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic;
                                                    51;
0;
                                                                                                                                                                                      of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 angiopoietin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                   pathogenic
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                          cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tactor;
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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δÃ

4861 TTTGTTTTGGCTGTTTTTTTAGTTCTGTATGTATTTTAGCAATCTC 4906

nervous

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RESULT 17
AAV17230
ID AAV177
XX AAV17
XX AV17
XX SCA2
XX SCA2
XX SCA2
XX SYNTH
XX WO980
XX WO980
XX 18-JU
XX 18-JU
XX ISANPE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                           Matches
        interleukin; G-protein coupled receptor; thioesterase; inf. multifactorial disease; autoimmune Alexano.
                                              neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer; amyloid protein; angiopoietin; apoptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
                                                                                                                                                                                                                                                                                2586 CAACAGAAGGGACAGCAGCCAGCCATCAGCTCGGCCTACCTGAGCAGCCGCCGCCCC 2645
                                                                                                                                                                                                                                                                                                                                                           Sequence 75
                                                                                                                                                                                                                                                                                                                                                                                                             II, by performing PCR on the test DNA using two primers hybridising
parts of the SCA2 gene sequence, and determining the number of CAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a fragment of the SCA2 gene. It can be used in the method of the invention for diagnosing spinocerebellar ataxis type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diagnosing spinocerebellar ataxis type number of CAG repeat units
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV17230;
                                                                                     Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
                                                                                                              Human SNP oligonucleotide #127.
                                                                                                                                                                 AAL26919;
                                                                                                                                                                                            AAL26919
                                                                                                                                                                                                                                                                                                                                                                                   the diagnosis of spinocerebellar ataxis type II.
                                                                                                                                                                                                                                                                                                                                                                                                 repeats in the amplified products.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 13; 23pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sanpei K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SRLS-) SRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9803679-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCA2 gene; spinocerebellar ataxis type II; CAG repeat; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV17230 standard;
                                                                                                                                                                                                                                                          <u>1</u>3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       щ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-120796/11
                                                                                                                                                                                                                                                          gene CAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTTTTTTTTTTTTTTTTTTGCATGTGTTTTAACAATCCC 46
                                                                                                                                                                                                                                                                                                           39;
system
                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tsuji S;
                                                                                                                                                                                                                                                                                                                                                           BP; 23
                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat unit fragment.
disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96WO-JP01999
                                                                                                                                                                                                                                                                                                                                                           A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                       0.5%;
                                                                                                                                                                                                                                                                                                                                                           29 C;
                                                                                                                                                                                                                                                                                                                      .0%;
 SS
                                                                                                                                                                                            51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75
                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ΒP
                                                                                                                                                                                                                                                                                                                                                           23 G; 0 U; 0 other;
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                      Score 26.4;
Pred. No. 2
                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                              The method provides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    II -
                                                                                                                                                                                                                                                                                                        ).3e+04;
nes 21;
                                                                                                                                                                                                                                                                                                                                  DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR and
                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 determining
                                                                                                                                                                                                                                                                                                                                                                                                 an easy
                         inflammation;
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                  means for
                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SS
                                                                                                                                                                                                                                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                                                                          0;
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Length
                                                               Indels
             rhinitis;
hepatic metastasis;
                                                               0;
                                                               Gaps
                                                               Copied from PCTUS2003092 on 04-03-2004
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CAG repeat; human; nucleic acid analy

human; genome analysis; medical diagnostic; analysis; variation assessment; neurologic

neurological disease;

Clone #8 fragment identified by CAG repeat analysis method

10-MAR-1999 AAV68382;

(first entry)

AAV68382 standard; DNA; 89 BP

Huntington's

chorea;

PCR suppression;

WO9849345-A1 Homo sapiens

29-APR-1998; 05-NOV-1998

98WO-US08616.

Synthetic

δÃ

1737 AAACTTGAAAACACACTTGAGATCTCACACTGGAGAGAAACCATACG 1783

AAACCTGATTGTACATCAGAGAACTCATACAGGAGAGAAACCCTATG 48

Matches Query Match Best Local :

Similarity

Conservative

0;

Pred. No. 2.26); Mismatches Score 26.2; DB 22 Pred. No. 2.2e+04;

13; 22;

Indels

0,

Gaps

0;

Length

51;

Sequence 51

вP;

19

A; 11 C; 0.5%;

10

G; 11 T;

0 other;

(e.g. cancer leukaemia),

diseases

of the bladder, brain, breast, iseases of the nervous system ar

system and

an

infection

of pathogenic

용

N

WPI;

Shimkets RA,

Leach M;

(CURA-) CURAGEN CORP.

28-DEC-1999; 99US-0173419 27-DEC-2000; 2000US-0173419

28-DEC-2000; 2000WO-US35498

05-JUL-2001.

WO200147944-A2. Homo sapiens.

The present

invention relates to oligonucleotides

encoding polymorphic proteins, angiopoietin,

Claim 1; Page 1434; 4143pp; English.

autoimmune diseases

Polymorphic nucleic acids encoding e.g. amylases, cyclins, poncogenes and histones, useful for diagnosing and treating,

cyclins, polymerases

e.g.

and infections

variants of proteins related to amylases, amyloid proteins, angiopoletin, apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related proteins, cytochromes, kinesins, cytokines, interferons, interleukins, G-protein coupled receptors and thioesterases. The present sequence is one such oligonucleotide. The oligonucleotides and the peptides encoded by them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate expression of the proteins listed above. Disorders that may be prevented, diagnosed and/or treated include multifactorial diseases with a genetic component, such as autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes, systemic lupus erythromatosus and Grave's disease), inflammation, cancer (e.g. cancers of the bladder, brain, breast, colon and kidney,

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KESULT 20
AAX53913
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                first and second primers; and (d) detecting the amplified product. The method is used to distinguish between the expression of genes in two or more biological samples, e.g. body fluids, cells, solid tissue or solid and liquid foods. It can be used in medical diagnostics, e.g. to differentiate between normal and diseased tissue or to assess the variation within monozygotic twin pairs. The method allows the isolation and analysis of genome subsets containing CAG repeats which are known to be important in a number of neurological diseases including Huntington's chorea. The method uses PCR suppression, in which only fragments which contain a target repeat are efficiently amplified. This allows accurate identification of differentially expressed genes in various cell types. Genome complexity is reduced by the new method which targets genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               is for analysing nucleic acids in a sample, and comprises: (a) providing a sample containing nucleic acid, a first ollgonucleotide primer comprising a CTG repeat, a second oligonucleotide primer comprising a COM repeat and a polymerase and PCR reagents; (b) preparing the nucleic acid so that it is amplifiable; (c) amplifying the nucleic acid with the
                                                                     chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2658 GCCCTGCTTCTCCAGCCGCCGCCTCCAG
                                   prostate cancer;
                                                                                                           respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema;
                                                                                                                                                   acute asthma; allergy; asthma; impeded respiration
                                                                                                                                                                       pulmonary vasoconstriction;
                                                                                                                                                                                                         Antisense oligonucleotide; multiple target; antisense treatment;
                                                                                                                                                                                                                                                 Human tryptase-I antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                         05-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                   AAX53913 standard; DNA; 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2598 CAGCAGCGCCAGCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTCCTCAGGGATCTC 2657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  subsets containing CAG repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents a fragment of a human CAG repeat containing clone DNA sequence isolated using the method of the invention. The method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contain CAG
                                                       hepatocellular carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Page 32; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-594983/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYBO-) UNIV BOSTON
                                                                                                                                                                                         impaired respiration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29 CAGCCCCACCAGCAGCAGCAGCAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 Similarity
49; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acid samples - using amplification primers which
AG or CTG tri:nucleotide repeats for differential display
s from different sources
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 2 A; 23 C; 37 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0045078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    56.3%;
                                                                                                                                                                   inflammation; lung disease; ction; inflammation; allergic
                                                     kidney
                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2684
                                                       cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e 26.2; Ub ...
1. No. 2.7e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27 T; 0 other;
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pulmonary hypertension; emphysema; pulmonary transplantation rejection; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;

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K K K K K X E X T T X C X X D
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The specification describes antisense oligonucleotides (AAX52869-X55271)
Chirected against at least 2 mRNAs selected from target genes, coding and conor-coding regions of RNAs corresponding to target genes, gene intiation codons, genomic flanking regions, intron-exon borders, the conditions and all segments of RNAs encoding proteins associated with one come come diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target conjugonucleotides (specifically AAX55180-271) can be used for the conjugonucleotides and conditions. Typical diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and conjugonucleotides and conjugonucleotides. Typical diseases and conjugonucleotides are the conjugonucleotides and conjugonucleotides (specifically AAX55180-271) can be used for the conjugonucleotides and con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nyce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09~JUN-1998;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09913886-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 45; 120pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-1999.
surfactant hypoproduction;
                          respiratory obstruction; pulmonary obstruction; impeded respiration;
                                                                     Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory;
                                                                                                                                                                                                                                 14-MAR-2001
                                                                                                                                                                                                                                                                                    AAF19478
                                                                                                                                                                                                                                                                                                                                     AAF19478 standard; DNA; 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2977 GCCCCGAGGAGGTGCAGCGACGGGGGAGCCCACGGCTACGGGCGGCGCCACCTGCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYEC-) UNIV
                                             immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCBGCBTCCTGGCCBCGGBBT 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACGATGCGCTGGGCCACGGCGT 3059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1999-229400/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                metastasized to the lungs, including breast and prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EAST CAROLINA.
                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0093972
97US-0059160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US19419
                                                                                                                                                                              polynucleotide fragment #1045.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31 C;
                                                                                                                                                                                                                                                                                                                                       ₽₽
pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35 G; 9 T; 15 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 26.2;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.7e+04;
nes 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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24-MAR-2000; 2000WO-US08020
                                                                                                                                                   WO200062736-A2
                                                                                                                                                        Homo sapiens.
                                                                                                                                                                chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                        (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                 06-APR-1999;
                                                                                                                                            26-0CT-2000
                                                                                                                                                              SS.
                                                                                                                                 99US-0127958
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cancers and respiratory obstructions Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for tr for treating

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Claim 14; Page 141; 1592pp; English.

receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease condition selected from pulmonary vasconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (1) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system peptide pulmonary transplantation rejection, pulmonary infections, and/or cancer. AAF18434 to AAF21543 represent human polynuc fragments and antisense oligonucleotides used in the exemple immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, oligonuclectides and compositions (I) comprising them. In the antisense oligonuclectides the A is replaced by a 'Universal' or alternative base (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), transmitters, defensins, growth factors, vasoactive peptides and The present invention describes low adenosine (A) content antisense can have respiratory, bronchodilator, antiinflammatory, analgesic present invention. human polynucleotide exemplification of bronchitis, or

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Sequence
 90
BP; 0
 Α;
 31 C;
 35
 G; 9 T;
 15
 other;
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Ş
                                                          Local
                       GCCCCGAGGAGGTGCAGCGACGGGGAGCCCACGGCTACGGGCGCGCCGCCACCTGCAGCCG 3036
GBCTGGGGGGGGGGCGCGTBGGCGGGGCTCGCCBGGBCGGGCBGCGCCBGCBGCBGCBG
                                               43; Conserv
                                               Conservative
                                                          51.8%;
                                                                       0.5%;
                                                          Score
Pred.
                                                Mismatches
                                                          26.2;
No. 2.
                                                         .7e+04;
                                                                       DB 21;
                                                Indels
                                                                       Length
                                                0,
                                               Gaps
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0

οy B σ CACGATGCGCTGGGCCACGGCGT 3059

Вþ

65

GCTCBGCBTCCTGGCCBCGGBBT 87

2977

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RESULT 22
AAA33356
                                                                                                                         the ONS reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
                                                                                                                                                                                                                       fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the
                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammatton. The ON can have antiinflammattory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are
                                                                                                                                                                                                                                                                                                                                                           impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vasoconstriction, inflabronchitis, emphysema,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-205971/18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200009525-A2
                               differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA33323 to AAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequence given in the sequence listing.
                                                                                                                                                                                                                                                                                                                                                                                                         useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiallergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   allergic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       phosphorothicate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; adenosine receptor; low adenosine antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA33356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA33356 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pulmonary hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         respiratory distress syndrome; pain; cystic fibrosis; emphysema;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Low adenosine antisense oligonucleotide SEQ ID NO:1045.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disease;
                                                                                                                                                                                                                                                                                                                                       ischaemic conditions, pulmonary vasoconstriction, allergies,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18; Page 396; 1343pp; English
                                                                                                                                                                                                                                                                                                                                                                                                 for the treatment of diseases associated with inflammation,
                                                                                                                                                                                                                                                                                                                       impeded respiration, respiratory distress syndrome, pain, cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ischaemic condition; pulmonary vasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0095212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US17712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     impaired respiration; inflammation; bronchoconstriction; inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               respiratory distress
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; analgesic; impaired airwa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     carcinoma; metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       obstructive pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               syndrome,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ischemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease; COPD;
                                                   sequences
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Best Loc Matches Query Match

Local

Similarity

51.8%;

Score 26.2; Pred. No. 2

2.7e+04

Length

90; 0

Indels

Gaps

0;

Sequence 66 BP;

24 A;

22 C;

20

ç.

0 Ç;

0 other;

Mismatches

Conservative

Sequence 90

ВP;

0 A;

31 C; 0.5%;

35 G;

9 T; 15

other; DB 21;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                   library, generated from a lymphoblastic cell line from a patient suffering from spinocerebellar ataxia (SCA), with MAb 1C2 isolated 6 new sequences (AAT78906-T78911) encoding polyglutamine repeats. This sequence is derived from clone DANI isolated from a patient of it or nucleic acids encoding it are specifically used to treat Huntington's disease, SCA types 1-5 or 7, X-linked spino-bulbular muscular atrophy (Kennedy disease), dentarorubral-pallidolusial atrophy dominant autosomal spinocerebellar ataxia, familial spastic paraplegia, bipolar affective disorder, manic depressive psychoses and achievents.
                                                                                                                                                                                                                                affinity to the TATA binding protein (TBP) transcription initiation factor, especially at the amino acid sequence LEEQGRQQQQQQ found at the N-terminus of TBP. Mab IC2 has been shown to have a high affinity for polyglutamine repeats with a proportional affinity to the number of glutamine repeats. This affinity has been used to identify genes
                                                                                                                                                                                                   encoding proteins containing long polyglutamine repeats which are implicated in neurodegenerative diseases. A screen of an express:
                                                                                                                                                                                                                                                                                                                The invention relates to a monoclonal antibody (MAb) 1C2 for the treatment of neurodegenerative diseases associated with the presence of polyglutamine repair regions. This MAD is already known for its of polyglutamine repair regions.
                                                                                                                                                                                                                                                                                                                                                                                          Claim 21;
                                                                                                                                                                                                                                                                                                                                                                                                                          repeats, e.g. Huntington's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                              diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-281034/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CNRS )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     X-linked spino-bulbular muscular atrophy; familial spastic paraplegia; dentarorubral-pallidolusial atrophy; bipolar affective disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat region; affinity; TATA binding protein; Kennedy disease; transcription initiation factor; lymphoblastic cell line; schiz
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lutz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-may-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9717445-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Huntington's disease; dominant autosomal spinocerebellar ataxia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Monoclonal antibody; neurodegenerative disease; polyglutamine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Poly-glutamine repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT78908;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT78908 standard; cDNA; 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     65 GCTCBGCBTCCTGGCCBCGGBBT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCCGAGGAGGTGCAGCGACGGGGAGCCCACGGCTACGGGCGGCGGCCACCTGCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACGATGCGCTGGGCCACGGCGT 3059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GBCTGGGGCBGGGCCGCGTBGGCGCGGGCTCGCCBGGBCGGCCBGCBGCBGCBGCBG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       depressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INSERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mandel J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1C2 used
                                                                                                                                                                                                                                                                                                                                                                                        Page 43; 69pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                            32 used for treating associated with pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENT NAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95FR-0013576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-FR01773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        psychosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tora L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AT RECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            region coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SANTE &
                                                                                                                                                                                                                                                                                                                                                                                            French.
                                                                                                                                                                                                                                                                                                                                                                                                                                       ring or preventing neuro-degenerative proteins containing long poly:glutamine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trottier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence from clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Υ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3036
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RESULT 24
AAC65408/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
   Query Match
Best Local
                                                                                                                                                                                                                        The present sequence was used in the construction of chimeric receptors. The properties and level of expression of a membrane-associated protein may be altered by substituting a transmembrane region or a membrane-anchoring region for transmembrane or membrane-anchoring regions that are not naturally part of the protein. The relative response of membrane-associated proteins to cell surface-associated antigen versus antigen in solution, and the sensitivity of intracellular signaling mediated by membrane-associated sensitivity of intracellular signaling mediated by membrane-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200063373-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antidiabetic;
                                                                                             diseases (e.g. asthma or eczema), congenital disorders (e.g. fibrosis or sickle cell anaemia), dermatological disorders (psoriasis), neurological disorders (e.g. multiple sclerosis) transplant rejection, graft-versus-host diseases, or metaboli
                                                                                                                                                             inflammatory/autoimmune disorders (e.g. rheumatoid arthritis, osteoarthritis or inflammatory bowel disease), cancer, allergic/atopic
                                                                                                                                                                                                              proteins can be altered. They can be important in treatment of,
                                                                                                                                                                                                                                                                                                                                                                        Example 2; Fig 3; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                      proteins, e.g., to change responses to cell surface antigens or the sensitivity of intracellular signaling
                                                                                                                                                                                                                                                                                                                                                                                                                                      Altering the properties or level of expression of membrane-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CLLT ) CELLTECH THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-APR-2000; 2000WO-GB01471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transmembrane domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 multiple sclerosis; organ transplant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antidiabetic; neuroprotective; chimeric receptor; infection; inflammatory disorder; autoimmune disorder; cancer; allergy; asthma; eczema; cystic fibrosis; sickle cell anaemia; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Membrane-associated protein; antiviral; antibacterial; antipar.
immunomodulatory; anticancer; antiinflammatory; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAC65408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC65408 standard; DNA; 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2586 CAACAGAAGGGACAGCAGCGCCAGCATCAGCTCGGCCTACCTGAGCAGCCGCCGC
                                                                                                                                                                                             infection, bacterial infections, parasitic infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-015774/02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                   86
                                                                                (e.g. diabetes).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lawson ADG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                   ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99GB-0008816
                                                  2 A; 31 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%;
0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for chimeric receptor construction.
                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 2.7e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 26; DB 18;
Pred. No. 2.7e+04;
                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LTD.
                                                   <u>ن</u>
                                                   30 T; 0 other;
   No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rejection;
                  DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 66
                Length 86;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                 or metabolic/idiopathic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiparasitic;
                                                                                                                               e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                cystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                            e.g. HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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Matches

Similarity

Conservative

0;

Mismatches

30;

0;

Gaps

0;

ABN52286

₽ Qy

Ç,

1756 AGATCTCACACTGGAGAGAAACCATACGTCTGTGAGC 1792

AAATCTTACACTGGAGAGAAACCCTATGAGTGTAAGC

41

Query Match Best Local S Matches

Local

Similarity

0.5%;

30;

Conservative

0; Score Pred.

Mismatches 25.8; No. 2

Indels Length

0,

Gaps

0;

5e+04; DВ

22;

AC XX

standard;

65

ABN52286; ABN52286

Pred.

3e+04;

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RESULT 25
AAH73705
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                         immunomodulatory or antiinflammatory activity. They can be used in the diagnosis and treatment of malignant tumours, haemopathy, HIV infection, immunological diseases and inflammatory conditions. The present sequence represents a probe specific for human cDNA encoding zinc finger protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; zinc finger protein 30; cytostatic; virucidal; antiinflammatory; malignant tumour; haemopathy; HIV ir immunological disease; inflammatory; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2567
                                                                                                      encoding it. Included in the invention is a vector containing the of sequence, a host cell transformed with the vector, and an antibody targeting the protein. The protein, polynucleotide sequence, and/or ant/agonists can be used to produce cytostatic, virucidal,
                                                                                                                                                                                                                                        Human zinc finger protein 30 and encoded polynucleotide, applicable in diagnosis and treatment of malignant tumor, hemopathy, HIV infection, impurploids a diagnoses and various inflammations
                                                                                                                                                                                                                                                                                                                          Mao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH73705 standard; DNA; 41
 Sequence
                                                                                                                                                                     This invention relates to human zinc finger protein 30 and the cDNA
                                                                                                                                                                                                Example 7; Page 15; 36pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                       (BIOD-) BIODOOR GENE TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                       21-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                   15-JAN-2001; 2001WO-CN00025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH73705
                                                                                                                                                                                                                                immunological diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGGAGCAGCAGC
                                                                                                                                                                                                                                                                                            2001-465373/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTGAGCAGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCACCCAGAACAGCAGGAGCAGTAGCAGGAGCAGCAGCAGGAGCAGCAGGAGCA 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCACTATGCTGAACATGCTCAACAGAAGGGACAGCAGCAGCAGCACCATCAGCTCGGCCT 2626
                                                                                                                                                                                                                                                                                                                          Xie
 41
 BP; 16 A; 7 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                      2000CN-0111480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30 cDNA specific
9 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                  various
 9 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                         LTD SHANGHAI
                                                                                                                                                                                                                                  inflammations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunomodulatory;
                                                                                                                                                      CDNA
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Matches
                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                 1626 GAAACCCTTCAAAGCCCAGTATATGTTGGTAGTGCATATGAGAAGACACACGGGGGAGAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                            detection of tissue- and pathology-specific genes such as those genes only expressed in specific tissue under a specific pathological condition; to detect developmental specific genes; and to detect RNA transcripts and splice variants of a transcriptome of a patient suffering from a particular disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from rats, humans and mice, which are used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The oligonucleotide libraries are useful for detecting mRNAs from a biological sample, in expression profiling studies, in qualitatively quantitatively characterising the corresponding transcriptome, and in detecting RNA transcripts and splice variants of human or animal transcriptomes. The libraries may also be used as specialised mini libraries to detect transcripts of a sub-transcriptome under a particular biological or pathological state, and so allowing the detection of tissue- and pathology-specific genes such as those genes
                                                                                                      1686 G 1686
                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                 at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                    N.B. The sequence data specification, but was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    transcription units that populate a genome. The library comprises several oligonucleotides, each capable of hybridising selectively to a set of messenger RNAs transcribed from a given transcription unit of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes oligonucleotide libraries for detecting messenger RNAs that populate a (sub-)transcriptome, where the (sub-)transcriptome comprises messenger RNAs transcribed from multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New oligonucleotide libraries comprising oligonucleotides which selectively hybridize to mRNAs transcribed from a transcription unit of a genome, useful for detecting tissue-, pathology-, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shoshan A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-JUL-2000; 2000US-221607P.
02-MAY-2001; 2001US-287724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           developmental-specific genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUL-2001; 2001WO-IBO1903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200210449-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 splice variant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse spliced transcript detection oligonucleotide SEQ ID NO:25034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (COMP-) COMPUGEN INC
                                                             65
                                                                                                                                          5 GAAAACCTTTATTCAACCCTCACGTCTTACAGAGCATATGAGAAGTCATACGGGAGAGAA 64
                                                                                                                                                                                                                                                                                                                                                                exemplification of the present invention.

The sequence data for this patent did not form part of the printed cification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genome, which encodes one or more messenger RNA splice variants.
                                                             G
                                                             65
                                                                                                                                                                                                                              39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mouse; rat; splice transcript; detection; RNA transcriptome; oligonucleotide library;
                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                             65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID 25034; 47pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wasserman
                                                                                                                                                                                                                                                                                                             BP;
                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                                                           A; 13 C;
                                                                                                                                                                                                                                               0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mintz E,
                                                                                                                                                                                                                                                                                                           16 G; 14 T; 0 other;
                                                                                                                                                                                                                            0
                                                                                                                                                                                                                     Pred. No. 3e+1
0; Mismatches
                                                                                                                                                                                                                                               Score 25.8;
Pred. No. 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mintz L,
                                                                                                                                                                                                                                             3e+04;
                                                                                                                                                                                                                                                                DB 24;
                                                                                                                                                                                                                            22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Faigler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA transcript;
                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                    WIPO
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                                                                                                                                                                                                                         0,
                                                   AAC21832
AXX
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                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                       AAD24301
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to methods of detecting genetic deletions, translocations and mutations associated with at least one condition selected from the group consisting of DiGeorge syndrome (DGS), CHARGE association, Velocardiofacial (Shprintzen) syndrome (VCF), conotruncal defect and/or cleft palate in a human patient. DGS is linked to chromosomal deletion of chromosome 22. The method involves identifying in a sample DNA if there are less than 2 functional copies of chromosome 22q11 and including locus D22336 to locus BCRL2, indicating a genetic deletion or mutation associated with the conditions. The method is useful for diagnosing DGS, VCF, CHARGE association, conotruncal defect and/or cleft palate, particularly in prenatal monitoring. The present sequence is
                                      AAC21832 standard; cDNA; 84
                                                                                                                                                                                                                                                            2764 CGCCGCTCCAGCGAAGCCAGCCAGAGCGACGGCCTGCCCAGCCTCAGCCTCACGCCC 2823
                                                                                                                                                                               2824 GCCCAGCAG
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel methods to detect genetic changes associated with DiGeorge syndrome, Velocardiofacial syndrome, CHARGE association, conotrum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-033211/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genetic deletion; translocation; mutation; conotruncal defect;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   der 22 DNA related to the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAD24301 standard; DNA; 74 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         defect and/or cleft palate are useful for prenatal screening for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Emanuel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-JUL-1992;
04-OCT-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US6303294-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DiGeorge syndrome; DGS; CHARGE association; Velocardiofacial syndrome; Shprintzen syndrome; cleft palate; der 22; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYPE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CHIL-)
                                                                                                                                        64
                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                         4
                                                                                                                                          TCCAAGCTG
                                                                                                                                                                                                                     DNA related
                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHILDRENS HOSPITAL PHILADELPHIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VINU
                                                                                                                                                                                                                                                                                                                                                                                       BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fig 6C;
                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Budarf ML,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92US-0911534.
91US-0770758.
93US-0156672.
                                                                                                                                                                               2832
                                                                                                                                                                                                                                                                                                                                                                                     15 A; 27 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-0473319
                                                                                                                                                                                                                                                                                                                                                                                                                              to the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 56pp; English.
                                                                                                                                                                                                                                                                                                                         60.9%;
                                                                                                                                                                                                                                                                                                                                               0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Driscoll D;
                                      ВP
                                                                                                                                                                                                                                                                                                                                                                                 17 G; 15 T; 0 other;
                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                         Score 25.8;
Pred. No. 3
                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                            .1e+04;
                                                                                                                                                                                                                                                                                                                                               DB 24;
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conotruncal

Copied from PCTUS2003092 on 04-03-2004

the

Dp Q 멍

RESULT 27

AAC21832

Indels Length

0;

Gaps

0,

74;

Human secreted protein 5' EST, SEQ ID NO: 25907.

06-OCT-2000 (first entry)

gene therapy; chromosome mapping; ss

expressed

Human; 5' EST,

Homo sapiens EP1033401-A2 J6-SEP-2000 21-FEB-2000; 2000EP-0200610.

99US-0122487.

Duclert A, Giordano J;

Dumas Milne Edwards J, WPI; 2000-500381/45.

(GEST) GENSET

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4838 GGAGTIGAAGAGATTAAACTGACTTTGTTTTGGCTGTTTTTTTAGTTCTGTAT 4890
                                                                                                                                                                                                                                                                  16 GGAGAGGAAAATTTTACAGGCTTTTTATTGCCCGGTTATTTTCTGTGT 68
                                                                                                                                                                                                                                        / Match 0.5%; Score 25.8; DB 21; Length 84; Local Similarity 67.9%; Pred. No. 3.2e+04; les 36; Conservative 0; Mismatches 17; Indels (
                                                                                                                                                                                                                              Sequence 84 BP; 15 A; 18 C; 23 G; 28 T; 0 other;
                                                                                                                                           Claim 1; SEQ ID 25907; 71pp + CD-ROM; English
                                                                                                                                                                                                                     expression and secretion vectors.
                                                                                                                                                                                                                                                                                               AAA36669 standard; DNA; 97
                                                                                                                                                                                                                                                                                                                   01-AUG-2000 (first entry)
                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                          AAA36669;
                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                     RESULT 29
AAA36669
δý
                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                     x y x h x e x m m m x x s s
5-2004
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Respiratory syncytial virus.

Parainfluenza virus.

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Virus (RSV), parainfluenza virus type I (PIVI), PIV2, PIV3, measles virus (MV) or mumps virus (MuV) fusion and attachment glycoproteins.

A vaccine comprising a protein as described above, can be used for treating a human or animal susceptible to paramyxoviridae viral infections. The heterochimeric proteins or their immunogenic derivatives are used in the manufacture of medicaments for use in the treatment of respiratory disorders. AAA36655 represent oligonucleotides used in the generation of PCK fragments as part of the construction of an RSV/PIV3 fusion protein nucleotide sequence, and AAA36699 to AAA36699 represent the RSV/PIV3 fusion protein nucleotide sequences produced in represent the RSV/PIV3 fusion protein nucleotide sequences produced in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        an example from the present invention. AAA36700 to AAA36799 represent oligonous locates used in the generation of PCR fragments as part of the construction of an MuV/MV lusion protein nucleotide sequence, and AAA36740 to AAA36743 represent the nucleotide sequences produced in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hamster Ovary (CHO) cells, a heterochimeric protein or its immunogenic derivative comprising immunogenic fragments of respiratory syncytial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a process for expressing, in Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                           heterochimeric proteins comprising fragments of in Chinese Hamster Ovary cells, useful as vaccines for treating a human or animal susceptible to paramyxoviridae viral infections -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human spliced transcript detection oligonucleotide SEQ ID NO:9206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; mouse; rat; splice transcript; detection; RNA transcript;
splice variant; transcriptome; oligonucleotide library; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3098 GCCTGGCCTCGTGTGTGCCGCGCTTCAGCAGCTCAGCAGCTGCAACCCC 3150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Expressing viral (e.g. parainfluenza virus and measles virus)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 25.8; DB 21; Length 97; 67.9%; Pred. No. 3.4e+04; Live 0; Mismatches 17; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 97 BP; 27 A; 35 C; 18 G; 17 T; 0 other;
                                                                                                                                                                                                                                                 (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Fig 28; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN36458 standard; DNA; 60 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JUL-2001; 2001WO-IB01903.
                                                                                                                           99WO-EP07004
                                                                                                                                                                          98GB-0020931
                                                                                                                                                                                                 99GB-0006868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-293163/25.
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nes 36; Conserv
                    WO200018929-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200210449-A2.
                                                                                                                                                                                                 24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUL-2002
                                                                                                                                                                          25-SEP-1998;
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                                                                      06-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-FEB-2002
                                                                                                                                                                                                                                                                                                Bollen A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN36458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN36458
δλ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. No ORF has yet been conclusively identified within the present sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA ilbraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer CDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intext 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                   sequence tag; secreted protein; cDNA isolation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RSV and PIV fusion protein F-RSV/HN-PIV3 oligonucleotide SEQ ID NO:28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fusion protein; heterochimeric; immunogenic; infection; RSV; PIV; MV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MuV: respiratory syncytial virus; parainfluenza virus; mumps virus; measles virus; glycoprotein; vaccine; immunisation; humanised; PCR; respiratory disorder; paramyxoviridae viral antigen; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining CDNAs and genomic DNAs that correspond to 5'ESTs and for
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Faigler S;

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The Pivesur Invention describes oligonucleotide ilbraries for detecting massenger RNAs that populate a (sub-)transcribtome, where the transcription units that populate a genome. The library comprises several oligonucleotides, each capable of hybridising selectively to a set of messenger RNAs transcribed from a given transcription unit of the genome, which encodes one or more messenger RNA splice variants of the genome, which encodes one or more messenger RNA splice variants of the genome, which encodes one or more messenger RNA splice variants of the genome, which encodes one or more messenger RNA splice variants of the genome, which encodes one or more messenger RNA splice variants of the oligonucleotide libraries are useful for detecting manas from a quantitatively characterising the corresponding transcriptome, and in capable of a sub-transcriptome, and in transcriptomes. The libraries may also be used as specialised minical particular bloodical or pathological state, and so allowing the detection of tissue- and pathological state, and so allowing the condition; to detect developmental specific genes; and to detect RNA cranscripts and splice variants of a transcriptome of a patient suffering from a particular disorder. ANA72253 to ABN5589 represent considering exemplification of the present invention.

C. the exemplification of the present invention.
                                                                                                                                                                                               New oligonucleotide libraries comprising oligonucleotides which selectively hybridize to mRNAs transcribed from a transcription unit of a genome, useful for detecting tissue-', pathology-, and
                                                                                                                                                                                                                                                                                                                                    The present invention describes oligonucleotide libraries for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence data for this patent did not form part of the printed ification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sense oriented; genetic suppressor element; GSE; reverse; BCL2; gene; mediated; suppression; apoptosis; mammalian; cell; inhibition; sensitisation; cancer; chemotherapeutic agent; increase; treatment; induction; virus; infection; death; disease; haematopoietic; neurological; recombinant construct; decrease; expression; anticancer; non-Hodgkin's lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid encoding BCL2 gene function inhibiting peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2489 CACAGTCCAACAACACCIGCAGCTTGGGTGGGCCCATGACGCTTCTCC 2536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 60 BP; 15 A; 16 C; 13 G; 16 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 25.6; DB 24
Pred. No. 3.2e+04;
                                                                                                                              Mintz L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    specification, but was obtained in electroni
at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                 Example 1; SEQ ID 9206; 47pp; English.
                                                                                                                          Mintz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT33692 standard; cDNA; 84 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell malignancy; mutant; ss.
                                                                                                                                                                                                                                                          developmental-specific genes
                  28-JUL-2000; 2000US-221607P. 02-MAY-2001; 2001US-287724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 0.5%;
1 Similarity 70.8%;
34; Conservative 0
                                                                                                                      Shoshan A, Wasserman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-JUN-1997 (first entry)
                                                                               (COMP-) COMPUGEN INC.
                                                                                                                                                           WPI; 2002-257383/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
AAT33692;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ⊕ESULT 31
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2622 GGCCTACCTGAGCAGCCGCCGCTCCTCAGGGATCTCGCCCTGCTTCTCCAGCCGCCGCTC 2681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is a sense oriented genetic suppressor element (GSE) for reversing BCL2 mediated suppression of apoptosis in a mammalian cell, which encodes a peptide capable of inhibiting BCL2 product can be used to sensitise cancer cells to chemotherapeutic agents, and to increase apoptosis, especially for the treatment of concer, but more generally to induce virus infected cell death, or neurological cells The GSE peptide product or a recombinant construct encoding the GSE can be used to decrease BCL2 gene expression by exerting an anticancer effect, e.g. in cases of neurological cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GGTCCACCTCCGCCAGGCGGCGACGACTTCTCCCGCGCGCTACCGCCGCGACTT 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The GSE was prepared by cloning the cDNA sequence encoding residues Val92 to Leull9 of the wild type human BCL2 cDNA in an expression vector, and generating numerous mutated sequences in vitro or in vivo. These were then screened for the ability to reverse apoptosis, and active clones selected.
                                                                                                                                                                                                                                                                                                        Sense oriented genetic suppressor element - for reversing BCL2 mediated inhibition of apoptosis, and for sensitising cancer cells against chemotherapeutic agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunomodulator; immunosuppressant; immunostimulator; treatment;
transplant rejection; autoimmune disease; cancer; infection; ss.
                                   a
"BCL2 gene function inhibiting peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 84;
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                                                                                                                                                                                                                                  Roninson IB, Schott B, Tarasewicz DG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 84 BP; 11 A; 38 C; 23 G; 12 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 25.6; DB 17
59.7%; Pred. No. 3.6e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA for immunomodulatory peptide D22021AX.
    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 36; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV05454/c
ID AAV05454 standard; DNA; 92 BP.
                                                                                                                                          96WO-US03545.
                                                                                                                                                                      95US-0405702
                                                                                                                                                                                                  (UNII ) UNIV ILLINOIS FOUND.
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                              /*tag=
                                               /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2682 CAGCGAGGCGTC 2693
                                                                                                                                                                                                                                                               1996-443179/44.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
es 43; Conserv
                                                                                                                                                                                                                                                                            P-PSDB; AAW02381.
                                                                                                                                                                                                                                 Holzmayer TA,
                                                                            WO9629403-A1
                                                                                                                                       14-MAR-1996;
                                                                                                                                                                      17-MAR-1995;
               mat_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Qy
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Gaps ;

14; Indels

Length 60;

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                                                                                                                                                                                                                                 (ASTR ) ASTRA
                                               WO9739023-A1
                                                                                                                            04-APR-1997;
                                                                                                                                                                                           12-APR-1996;
                                                                                                                                                                   23-SEP-1996;
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                                                                                      23-OCT-1997
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AAV05448/c
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        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acids encoding cysteine or methionine-containing peptide(s) which have immuno:stimulatory or immunosuppressive activity - can be used to treat, e.g. cancers, infection, auto:immune disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 CCTGCAAGGCAGACGGCGACAGAGCCACCAGCAGCATGCCCGCGGGACACCAGCAGCGG 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunostimulatory peptide. An immunosuppressant can be used to treat transplant rejection or autoimmune disease, e.g. rheumatoid arthritis, systemic lupus erythematosis, Sigaren's syndrome, scleroderma, mixed connective tissue disease, dermatomyositis, polymyositis, Reiter's syndrome, Behcet's disease, type I diabetes, Hashimoto's thyroiditis, Graves' disease, multiple sclerosis, myasthenia gravis, encephalomyelitis, phemphigus vulgaris, vegetans or foliaceus, Senear-Usher syndrome or Brazilian phemphigus. An immunostimulator can be used to treat conditions such as cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunomodulator; immunosuppressant; immunostimulator; treatment; transplant rejection; autoimmune disease; cancer; infection; ss.
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0
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                                                                                                                                                                                                                                                                                                                                                 Bergstrand H, Eriksson T, Lindvall M, Saernstrand B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence encodes an immunosuppressing or
                                                                                 /transl_except= (pos:91..92, aa:11e)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 25.6; DB 18;
62.5%; Pred. No. 3.7e+04;
Live 0; Mismatches 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 92 BP; 4 A; 31 C; 33 G; 24 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA for immunomodulatory peptide D22020AX.
                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 14; Page 158; 183pp; English,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV00492 standard; DNA; 93 BP
                                                                                                                                                                                                        97WO-SE00574
                                                                                                                                                                                                                                              96SE-0003469
96SE-0001422
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                                                          /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transplant rejection
                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-526397/48,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
les 40; Conserv
                                                                                                                                                                                                                                                                                                             (ASTR ) ASTRA AB.
                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; AAW45013.
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                                                                                                                                                                                                        04-APR-1997;
                                                                                                                      WO9739023-A1
                                                                                                                                                                                                                                              23-SEP-1996;
                                                                                                                                                                                                                                                                  12-APR-1996;
                                      mat_peptide
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                     Key
XX B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X
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2580 CATGCTCAACAGAAGGGACAGCAGCGCCAGCATCAGCTCGGCCTACCTGAGCAGCCG 2639
                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acids encoding cysteine or methionine-containing peptide(s) which have immuno:stimulatory or immunosuppressive activity - can be used to treat, e.g. cancers, infection, auto:immune disease or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            myasthenia gravis, encephalomyelitis, phemphigus vulgaris, vegetans or foliaceus, Senear-Usher syndrome or Brazilian phemphigus. An immunostimulator can be used to treat conditions such as cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence encodes an immunosuppressing or immunostimulatory peptide. An immunosuppressant can be used to treat transplant rejection or autoimmune disease, e.g. rheumatoid arthritis, systemic lupus erythematosis, Sjogren's syndrome, scleroderma, mixed connective tissue disease, dermatomyositis, polymyositis, Reiter's syndrome, Behcet's disease, type I diabetes, Hashimoto's thyroiditis, Graves' disease, multiple sclerosis,
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transplant rejection; autoimmune disease; cancer; infection; ss.
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Query Match

Query Match

0.5%; Score 25.6; DB 18;

Best Local Similarity 62.5%; Pred. No. 3.7e+04;

Matches 40; Conservative 0; Mismatches 24;
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1..93
/*tag= a
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97WO-SE00574
                                                                   96SE-0003469
                                                                                                         96SE-0001422
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23-SEP-1996;
12-APR-1996;
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                                                                                                                                                                                                                                                      Infection.
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                                                                                                                            Nucleic acids encoding cysteine- or methionine-containing peptide(s) which have immuno:stimulatory or immunosuppressive activity - can be used to treat, e.g. cancers, infection, auto:immune disease or transplant rejection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immunomodulator; immunosuppressant; immunostimulator; treatment; transplant rejection; autoimmune disease; cancer; infection; ss.
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                                                                                                                                                                                                                                                                                                                         Length 93;
                                                                                                                                                                                                                                                                                                                                         24; Indels
                                                                                    Saernstrand B;
                                                                                                                                                                                                                                                                                                                      Score 25.6; DB 18;
Pred. No. 3.7e+04;
0; Mismatches 24;
                                                                                                                                                                                                                                                                                                   Sequence 93 BP; 5 A; 29 C; 34 G; 25 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA for immunomodulatory peptide D22069AX.
                                                                                  Bergstrand H, Eriksson T, Lindvall M,
                                                                                                                                                                          Claim 14; Page 158; 183pp; English.
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                    97WO-SE00574
                                     96SE-0003469.
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nes 40; Conservative
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                                                                (ASTR ) ASTRA AB.
                                                                                                            P-PSDB; AAW45007
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                   04-APR-1997;
                                     23-SEP-1996;
                                              12-APR-1996;
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9 CAGC
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2580 CATGCTCAACAGAAGGGACAGCAGCACCAGCACCATCAGCTCGGCCTACCTGAGCAGCCG 2639
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence encodes an immunosuppressing or immunostimulatory peptide. An immunosuppressant can be used to treat transplant rejection or autoimmune disease, e.g. rheumatoid arthritis, systemic lupus erythematosis, Sjogren's syndrome,
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                                                                                                                                                     Eriksson T, Lindvall M, Saernstrand
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62.5%; Pred. No. 3.7e+04;
live 0; Mismatches 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 93 BP; 4 A; 31 C; 32 G; 26 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 14; Page 158; 183pp; English.
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96SE-0003469.
96SE-0001422.
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96SE-0001422.
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Matches 40; Conservative
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                                                                                        (ASTR ) ASTRA AB.
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                                                                                                                                                     Bergstrand H,
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                            12-APR-1996;
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2580 CATGUTCAACAGAAGGGACAGCGCCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCG 2639
                                                           Nucleic acids encoding cysteine- or methionine-containing peptide(s) which have immuno:stimulatory or immunosuppressive activity - can be used to treat, e.g. cancers, infection, auto:immune disease or
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Live 0; Mismatches 24; Indels
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                                                                                                                                                   Claim 22; Page 163; 183pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV05456 standard; DNA; 96 BP.
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96SE-0001422.
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                                                                                                                      transplant rejection
   WPI; 1997-526397/48.
P-PSDB; AAW45039.
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les 40; Conserv
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AAV05456/C
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                                                                                                                          Nucleic acids encoding cysteine or methionine containing peptide(s) which have immuno:stimulatory or immunosuppressive activity - can be used to treat, e.g. cancers, infection, auto:immune disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunostimulatory peptide. An immunosuppressant can be used to treat transplant rejection or autoimmune disease, e.g. rheumatoid arthitis, systemic lupus erythematosis, Sjogren's syndrome, scleroderma, mixed connective tissue disease, dermatomyositis, polymyositis, Reiter's syndrome, Behcet's disease, type I diabetes, Hashimoto's thyroiditis, Graves' disease, multiple sclerosis, myasthenia gravis, encephalomyelitis, phemphigus vulgaris, vegetans or foliaceus, Senear-Gsher syndrome or Brazilian phemphigus. An immunostimulator can be used to treat conditions such as cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunomodulator; immunosuppressant; immunostimulator; treatment; transplant rejection; autoimmune disease; cancer; infection; ss.
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52.5%; Pred. No. 3.7e+04;
Ive 0; Mismatches 24; Indels
                                       Saernstrand B;
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                                                                                                                                                                                                                                                              present sequence encodes an immunosuppressing or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 93 BP; 6 A; 30 C; 32 G; 25 T; 0 other;
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                                 Bergstrand H, Eriksson T, Lindvall M,
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                                                                                                                                                                                                                        Claim 14; Page 159; 183pp; English.
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96SE-0001422.
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                                                                                                                                                                                       transplant rejection
                                                                       WPI; 1997-526397/48
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nes 40; Conserv
(ASTR ) ASTRA AB.
                                                                                        P-PSDB; AAW45017
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-APR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV05459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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Matches
                                                                                                                                                                                                                                                              The
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                                                                                                                                                                                                                                                                                                                                                                                        2580 CATGCTCAACAGAAGGGACAGCAGCGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCG 2639
                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              which have immuno:stimulatory or immunosuppressive activity - can be
                                                                                           The present sequence encodes an immunosuppressing or immunostimulatory peptide. An immunosuppressant can be used to treat transplant rejection or autoimmune disease, e.g. rheumatoid arthritis, systemic lupus erythematosis, Sjogren's syndrome, scleroderam, mixed connective tissue disease, dermatomyositis, polymyositis, Reiter's syndrome, Behcet's disease, type I diabetes, Hashimoto's thyroiditis, Graves' disease, multiple sclerosis, myasthenia gravis, encephalomyelitis, phemphigus vulgaris, vegetans or foliaceus, Senear-Gsher syndrome or Barazilian phemphigus. An immunostimulator can be used to treat conditions such as cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified virus; adenovirus; cytostatic; gene therapy; tumour cell; proliferating cell; cancer; vascular disease; inflammatory disease; infectious disease; human immunodeficiency virus; HIV; PCR; primer;
               used to treat, e.g. cancers, infection, auto:immune disease or transplant rejection
                                                                                                                                                                                                                                                                                                                          Length 96;
                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Recombinant adenovirus fiber associated primer 418.
                                                                                                                                                                                                                                                                                                                                                            24;
                                                                                                                                                                                                                                                                                                                            DB 18;
                                                                                                                                                                                                                                                                                          Sequence 96 BP; 5 A; 30 C; 35 G; 26 T; 0 other;
                                                                                                                                                                                                                                                                                                                        Score 25.6; DB 18
Pred. No. 3.8e+04;
0; Mismatches 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Boulanger PA;
                                                                Claim 14; Page 159; 183pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 46; 163pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK43215 standard; DNA; 96 BP.
                                                                                                                                                                                                                                                                                                                        0.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUL-2001; 2001WO-GB03252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                          40; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-217049/27.
                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GARD/) GARDNER R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200208263-A2.
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The invention describes a modified virus comprising non-native

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of manufalian host cell in conformation which is maintained in absence of ligands for the binding moleties, where the conformation allows the binding moleties, where the conformation allows the binding molety subsequently to bind with the ligand. The modified virus is useful in therapy for the preparation of a medicament for treating tumour cells, cancer, proliferating cells, vascular diseases, inflammatory diseases and infectious diseases such as Human immunodeficiency virus (HVV). The altered tropisms allow the virus to be used in treatment of disease in human or animal subjects, either by in vivo treatment of, or ex vivo treatment of cells of, the subject requiring treatment. The problems associated with the expression of functional non-native viral components in the nucleus and cytosol of host cells is solved by using the modified virus for the purpose. This sequence represents a primer associated with the creation of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
                 moiéties, where the virus has altered tropism conferred by the binding moieties. The polypeptides can be expressed in the cytoplasm and nucleus
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2596 GACAGCAGCGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTCCTCAGGGATC 2655
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptides which has framework moieties each containing binding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a single exon nucleic acid probe for
                                                                                                                                                                                                                                                                                                                                                                          Length 96;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human foetal liver single exon nucleic acid probe #20636.
                                                                                                                                                                                                                                                                                                                                                                                                               52; Indels
                                                                                                                                                                                                                                                                                                                                                                          DB 24;
                                                                                                                                                                                                                                                                                                                                       Sequence 96 BP; 8 A; 14 C; 10 G; 10 T; 54 other;
                                                                                                                                                                                                                                                                                                                                                                          Score 25.6; DB 24 Pred. No. 3.8e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   analyzing gene expression in human fetal liver
                                                                                                                                                                                                                                                                                                  modified vector, described in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2656 TCGCCCTGCTTCTCCAGCCGCCGCTCCAGCGAGG 2689
                                                                                                                                                                                                                                                                                                                                                                                                             17; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 NNSNNSNNSNNSCGTTTCAGCTCCAGCTTGG 95
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2000US-0236359.
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nes 25; Conservative
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21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
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AA146596
AAS46369
ABN80096
AAS46370
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AAI33460
ABA71965
AAI52336
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ABL03986
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ABI99239
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AAA62683
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AAI39286
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ABS08520
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 03-OCT-2001; 2001WO-US30821
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 WO200228999-A2
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171.1
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Oligonucleotide fo
Murine Glil coding
Human GLI-1 nucleo
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Human Gli3 coding
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Murine Gli3 coding
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17843.027 Million cell updates/sec
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                                                                                       December 10, 2002, 19:50:51; Search time 638 Seconds
                         Compugen Ltd
          GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compue
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                                                                                                                                                                                                                                2185239 seqs, 1125999159 residues
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first 45 summaries
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Tumour suppressor Human chemically m Drosophila melanog. Drosophila melanog Mouse ischaemic co. Human glioma-assoc Oligonucleotide fo Oligonucleotide fo Human foetal liver Drosophila melanog Human foetal liver Probe #2146 used t Human chemically m Drosophila melanog Probe #7972 used t used to Human cDNA for nov Human genome-deriv Drosophila melanog Human genome-deriv Human genome-deriv Human protein enco Human foetal liver Probe #21022 used Human genome-deriv DNA encoding novel Human genome-deriv Human genome-deriv Drosophila melanog Human foetal liver Probe #15282 used Human Glil coding Human Glil coding Tumour suppressor Human Glil coding Human Zicl gene. Gene #1716 used Human; ss; granulocytic cell; DNA chip; bacterial infection; viral infection; parasitic infection; protozoal infection; fungal infection; sterile inflammatory disease; psoriasis; rhemmatoid arthritis; glomerulonephritis; asthma; thrombosis; cardiac reperfusion injury; renal reperfusion injury; ARDS; adult respiratory distress syndrome; inflammatory bowel disease; crohn's disease; ulcerative colitis; periodontal disease; granulocyte activation; chronic inflammation; allergy. Human cDNA differentially expressed in granulocytic cells #607 ALIGNMENTS

Vockley J;

drug toxicity

Detecting granulocyte activation by detecting differential expression of genes associated with granulocyte activation, which serves as diagnostic markers that is useful for monitoring disease states and

Claim 1; SEQ ID No 607; 114pp; English.

The invention relates to detecting (MI) granulocyte (GC) activation (CC (GCA), by detecting the level of expression of gene(s) (Gs) identified by Na chip analysis as given in the specification, and comparing the expression level to an expression level in an unactivated the expression level to an expression level in an unactivated of GCA. The included are modulating (M2) GA by contacting GC with an agent also included are modulating (M2) GA by contacting GC with an agent capable of modulating GCA or an inflammation (especially chronic) in a tissue, an altergic response in a subject, exposure of a subject to a pathogen or sterile inflammatory disease using the chronic) in a tissue, an altergic response in a subject, exposure of a subject to a pathogen or sterile inflammatory disease, by detecting the chronic) in a tissue, an altergic response in a subject, exposure of a subject to a pathogen or sterile inflammatory disease, by detecting the level of expression of the gene is indicative of inflammation; considerative of inflammation and inflammatory disease, by contacting a subject to a pathogen or sterile inflammatory disease, by contacting GCA; M2 is useful for a linflammatory disease, by contacting GCA; M2 is useful for or sterile inflammatory disease, by contacting GCA; M2 is useful for screening an agent capable of modulating GCA preferably in an inflammation in a subject, to a pathogen or sterile inflammatory disease, by contacting GCA; M2 is useful for creening an inflammatory disease, cronic and a tissue, an allergic response in a subject, exposure of a subject to a pathogen or sterile inflammatory disease, cronic and a subject, to a pathogen or sterile inflammatory disease, cronic and adistact response in a subject, exposure of a subject to a pathogen or sterile inflammatory disease, cronic and adistact or parastic infection, protozoal infection, inngul infection, protozoal infection, fundal infection in general for treating one of the above conditions. The present expression of the above conditions. The Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at

Sequence 5055 BP; 1243 A; 1591 C; 1290 G; 931 T; 0 other; ftp.wipo.int/pub/published_pct_sequences.

DB 24; Length 5055; Indels ; 100.0%; Score 5055; 100.0%; Pred. No. 0; ative 0; Mismatches Matches 5055; Conservative Local Similarity Couery Match ong Ogal

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- 1 CGATACTACGTGGGCATTTTTGGTCGAAGAGGGCTGAAGTAATGAGAAGACATCATGGAG 60
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- GATGAAAGTCCTGGACAGACTTATCACAGAGAGAAGAAAACGCAATCACTATGCAGCCA 181 181 q ò
- CAGAATGTCCAGGGCTCAGCAAAGTCAGTGAGGAACCTTCAACATCGAGTGACGAGAGG 241 ŏ

AGCTTTGACCTTCAGACCATGATAAGGACGTCTCCCAACTCCTTGGTCACGATTCTCAAT 1020 AATTCCCGTAGCAGCTCTTCAGCAAGTGGCTCCTATGGTCACTTATCTGCAAGTGCAATC 1080 1081 AGCCCTGCCTTGAGCTTCACCTACTCTTCGGGGCCCGTCTCTCCACATGCATCAGCAG 1140 GTGAGCAGCACCACTGGTGACCCGGATGCACAACAAGAGGTCCAAGATCAAACCCGGATGAAGAC 1380 1381 CTCCCCAGCCCAGGGGCTCGGGGGCAGCAGGAACAGCCCGAAGGAACAACCCTTGTCAAG 1440 GCCTCATTGATCAAGAAAAGAGATCCATGGGTCCCTGCCACACGTGGCGGAGCCCTCTGTG 360 099 720 780 840 900 GAGGCCGTTACCATTACGATCCATCCCGATTCCTCCATTGCATATGACTTCGCCTTA TCTAGTAGCCCTACGTATCCGGACCTGCCCTTCATTAGGATCTCCCCACACCGGAACCCC TATATCCGCTCCTTGCACAGCAGCCCATCGCTCTCCATGATCTCAGCAACCCGTGGGCTG TATATCCGCTCCTTGCACAGCAGCCCATCGCTCTCCATGATCTCAGCAACCCGTGGGCTG AGGCTGTCAGCCAGGCCGAGCCGAAAACGTACACTGTCCATATCACCACTCTCCGATCAT CCGTACCGCGGGACGGTGTTTGCCATGGACCCCCAGGAATGGTTACATGGAGCCCCCACTAC CACCCTCCTCTTTTCCCTGCCTTCCATCCTCCTGTACCAATTGATGCCAGACATCAT GAGGGCCGTTACCATTACGATCCATCTCCGATTCCTCCATTGCATATGACTTCCGCCTTA GCTGCTGCTTCCGAGTCTCCCTTCAGCCCTCCACATCCCTACATTAATCCCTACATGGAC AGCCCTACAGATGCGCCCCATGCAGGAGTCAGCCCAGCAGAATACTATCATCAGATGGCC CTGCTAACTGGCCAGCGCAGCCCCTATGCAGACATTATTCCCTCAGCTGCCACCGCCGGC ACGGGGCCCATCCACATGGAATATCTTCATGCTATGGATAGCACCAGATTCTCCAGCCCC ATCCTAAGCCGACAACAGAGCTTAGGTTCAGCCTTTGGACACACAGCCCTCCACTCATCCAC 1201 CCTGCCCCAACTTTTCCAACACAGAGGCCTATTCCAGGGATCCCTACGGTTCTGAACCCC 721 961 1021 1081 1141 1141 301 301 361 421 421 481 541 541 601 661 781 781 841 901 1021 361 481 601 661 721 901 961 1321 qq qq g g qq q g ŏ Qγ Q QΥ δ g δy δ ōγ q a Dp ρp ò δλ g δ q δλ Ω οy Db δ g δy qq g ŏ Qγ

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AGGGGTCGGGGGCAGCAGGAAC	CCAAAGATGAAAGCAAACAGGAGCC 	GCTGCGCGAGGGAGTTCGACACCC 	TCATGGAGAAGAAGGAGTTCC 	CTTCAAAGCCCAGTATATGTTGC 	AAATGCACTTTTGAAGGTTG 	TTGAGATCTCACACTGGAGAG 	CTTTCTCAAATGCCTCTGATCGCC 	CATATGTGTGCAAAATCCCAGGC 	GAAACATGTGAAGACAGTGCATGGC 	CATCCTCGGCCGCCACCCCCCCCCCCCCCCCCCCCCCCC	CCGACCGACTCAGGGAGCCCTT 	GGAAGAATGCCTCCAGGTGAAAACC 	CTGGTGGTCAGTCTTCATG	GCTCGAGCTTCCTCT 	GAAACCCCAATCATGGACTCAACC 	GGGCAGGGACCAAATGG 	AATGGAATGTTTCC 	TCTCATAGGAAATGGCACACAG
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The present invention relates to agents for the promotion of bone and cartilage formation which contain as the active component a Glil protein
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orthopaedic disease; dental disease; osteoporosis; hyperosteogenesis;
osteopathic; antiarthritic; vulnerary; immunosuppressive;
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           GCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCACCAACATGGCTATCGGGGACAT
                                                     TITGITITGCCTGITITITAGITCTGTATGTATTTTAGCAAICTCATCTCACTG
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                                          GAGTTCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGC
                                                                                     TTTAGGAAAAAAAAAGACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGAC
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or a DNA encoding a Glil protein. The agents can be used in the prevention, treatment and diagnosis of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis, osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, bone defects, dental disease, hyperosteogenesis, and hyperchondrogenesis, and for use in cosmetic and therapeutic bone transplantation. The present sequence is a human Glil coding sequence described in the exemplification of the invention.
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                                      AGCITTGACCITCAGACCATGATAAGGACGICTCCCAACTCCTTGGICACGATICTCAAT
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cartilage formation which contain as the active component a Gill protein or a DNA encoding a Gill protein. The agents can be used in the prevention, treatment and diagnosls of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis, osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, dental disease, hyperosteogenesis and hyperchondrogenesis, and for use in cosmetic and therapeutic bone transplantation. The present sequence is a murine Gill coding sequence described in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        366 GCAGGGTCTCAACAAAATCACTGAGGAGCCCTCGACGTCTAGTGATGAGAGGGCCTCGCT 425
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  246 GAGAACAGATGTCAGCGAGAAGGCCGTGGCCTCTAGTACCACTTCCAATGAGGATGAAAG 305
           Glil; screening method; bone induction; cartilage induction; orthopaedic disease; dental disease; osteoporosis; hyperosteogenesis; osteopathic; antiarthritic; vulnerary; immunosuppressive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to agents for the promotion of bone and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 CGTGGGCATTTTTGGTCGAAGAGAGGCTGAAGTAATGAGAAGACATCATGGAGGCCCAGTC 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          249 CCAGGGGCTCAGCAAAGTCAGTGAGGAACCTTCAACATCGAGTGACGAGAGGGCCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTGGACAGACTTATCACAGAGAGAAGAAACGCAATCACTATGCAGCCACAGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73.1%; Score 3696.6; DB 24; Length 5113; 84.2%; Pred. No. 0; ative 0; Mismatches 769; Indels 24; ative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Promotion of bone and cartilage formation using G111 protein or encoding it for treatment of skeletal disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5113 BP; 1337 A; 1490 C; 1254 G; 1032 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 133-136; 154pp; Japanese
                                                                    hyperchondrogenesis; mouse; gene; ss
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/product= "Gli3"
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Matches 4212; Conservative
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1868 1928 2045 1988 2105 2048 2165 2108 2225 2168 2285 2228 2345 2288 2405 2348 2465 2468 2645 2408 1806 TCACAAAATGTACATTTGAAGGTTGCACAAAAGCCTACTCAAGACTCGAAAACCTGAAAAAC 2046 GAAACACGTGAAGACTGTGCATGGCCCTGAGGCTCATGTTACCAAGAAGCAGCGTGGGGA 2166 TGGCCGGCCAACTCAGGGAGCATTTGGTGAGCAGAAGGAGCTGAGCAACACTACCTCAAA 2586 TCCTCTCATAGGAAATGGCACACACACAATAACAACAATAGCTCGGGTGGGCCCGGGAC GGACAAAGATGAAAGCAAACAGGAGCCTGAAGTCATCTATGAGACAAACTGCCACTGGGA ACCCTTCAAAGCCCAGTATATGTTGGTAGTGCATATGAGAAGACACACGGGCGAGAAGCC TCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTCGAGACTAGAAAACTTGAAAAC 1749 ACACTTGAGATCTCACACTGGAGAGAAACCATACGTCTGTGAGCACGAAGGTTGCAACAA GGCTTTCTCAAATGCCTCTGATCGCGCCAAACACCAAAACAGAACGCATTCCAATGAGAA GAAACATGTGAAGACAGTGCATGGCCCAGAGGCTCATGTCACCAAGAAGCAGCGAGGGGA CATCCATCCTCGGCCGCCACCCCCGAGAGATTCCGGCAGCCATTCACAGTCCAGGTCGCC CATGCACCCTCGGCCTCCACCCCCGAGAGATTCCGGCAGCCATTCACAGTCCAGGTCCCC 2049 TGGCCGACCGACTCAGGGAGCCCTTGGTGAGCAGCAGGACCTCAGCAACACTACCTCAAA GCGGGAAGAATGCCTCCAGGTGAAAACCGTCAAGGCAGAGAAGCCAATGACATCTCAGCC AAGCCCTGGTGGTCAGTCTTCATGCAGCAGCCAACAGTCCCCCATCAGCAACTATTCCAA CAGTGGGCTCGAGCTTCCTCTGACCGATGGAGGTAGTATAGGAGACCTCAGTGCCATCGA TGAAACCCCAATCATGGACTCAACCATTTCCACTGCAACCACAGCCCTTGCTTTGCAAGC TGAAACCCCAATCATGGACTCGACCATTCCACGGCAACCACAGCCCTTGCTTTGCAAGC CAGGAGAAACCCGGCAGGGACCAAATGGATGGAGCCACGTAAAACTAGAAAGGCTAAAACA AGTGAATGGAATGTTTCGGGGACTGAACCCCATTCTACCCCCTAAAGCCCCTGCGGTCTC AGTGAATGGAATGTTTCCAAGACTGAACCCTATTCTACCCTCCAAAGCCCCTGCGGTATC 1626 1746 1809 1926 1986 2106 2226 2169 2286 1509 1869 2466 1449 1689 1929 1989 2109 2229 2346 2289 2406 2526 2349 2409 2469 g g В g g qq Q δŽ Ω q δy ŏ δŻ Qγ δŽ g QΥ ÓΣ qq QΥ g Q g QΣ qq Ω q δλ g QΥ δy OD Ω Q Qγ Db

Wed Dec 11

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11 111 3726 GCAGCA	3669 GA 3786 GAAGGT	3723 CGGTGG 3846 CAATGG	3783 CTTCCA 3906 TTTCCA	3843 GGCCCC 3966 GACTTC	3903 CACCCC 4026 CAACAG	3963 GTCAGC 4086 GTTAGC	4023 GGCTCA 4146 TGCCCA	4083 GATGCT 4206 GGTACT	4143 CCTGCC 4266 CCTACC	4203 CCAGCC 4326 CCAGCC	4263 TCTGCA 4386 TCTGCA	4323 GGAGAT(4446 GGAGGC	4383 CTATGA(4506 CTATGA(4503 IGCTAA: 4626 IGCTAA	4563 GATTGA(4686 GATTGA'	4623 GAGCCC/ 4746 GAGCCC	4683 GTCCCT(
qq	oy G	y da	Oy Db	oy op	Oy Db 4	OY 3	Qy 4 Db 4	Oy Db 4	Qy 4 Db 4	Qy 4	OY 4	Oy 4 Db 4	Oy 4 Db 4	Qy 4 Db 4	Qy 4 Db 4	QY 4 Db 4	Qy 4 Db 4	0y 4
2529 GCTTCTCCCGGCAGAAAGCGACCTCTGGGGTGGACGTCACTATGCTGAACATGCTCAA 2588 	2589 CAGAAGGGACAGCGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCGCCGCTCCTC 2648	2649 AGGGATCTCGCCTGCTTCTCCAGCCGCGCTCCAGCGAGCG	2709 GCCGCAGAACGTGAGCGTGGCCGACTCCTACGACCCCATCTCCACCGACGCCTCGCGCCG 2768 	2769 CTCCAGCGAAGCCAGAGCGACCCTGCCCAGCCTCAGCCTCACGCCCGCC	2829 GCAGTACCGCCTCAAGGCCAAGTACGGGGCTGCCACAGGAGGGCCGCGGCGACGCCCCT 2888 	2889 GCCCAACATGGAGAGGATGAGCCTGAAGACGCCTGGGGCTGCTCGGGATGCCCTCGA 2948 	2949 GCCTGGCGTGGCCTGCCTCCAGTTCATGCCCCGAGGAGGTGCAGCGAGCG	3009 CGGCTACGGCGCGCCCACCTGCAGCGCACGATGCGCTGGGCCACGGCGTGAGGAGGC 3068 		3129 CAGCCTCAGCAGCTGCAACCCCCGGCGACGACGTCCGGGGGAGAAGCGCAGTCTCGT 3188	3189 GCTTCAGAATTACACGGGGCCGAGGGGGCAGTCCCGAAACTTCCACTCGTCCCCTG 3248 	3249 TCCTCCCAGCATCACCGAGAACGTCACCCTGAGCTCCCTGACCATGGACGCTGATGCCAA 3308 		3369 AGCAGGGTACGAGCACTTCCCCAGCGCCCTCCCGGACGACAAGGGCCCACGG 3428 	3429 GCCGGTGACTTTGACGCCCGGGCTGCCAGACAGCCACGTGGCCAGCAGCATCCATGC 3488		3549 CAGCTCCGGAAGCGCCGACCTGTCCTCCTCCAAGCTCAAGTGTGGGCCGCGGCCGCTGT 3608	
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4025 4262 AGCCTCGGGGTTTTGGGCTATACAACAATATGGTGGTACACCCACATAATCTGTG 3785 ---GGAGCGGGCCTGCTGGGGGCTATCAGACCCTCGGGGAGAACAGCAACCCCTA 3722 4442 4562 CCATGCAAGGGAGCGGGGCCAGCTGAATTTCGGCCTGCCGGTAGCGCCAAATGA GCCCAGAGCACTTGATGCTCCACAACAGCCCCGGAAGTGGCACCAGTGGAAACGC ATGAACAGCCCTGTAAGGCCCCGCAGTATGGGAACTGTCTCAACAGGCAGCCAGT TTGGGCAGATTAGTGCTACCTCACATCAACATCTACCAAGGGCCAGAGAGCTG CAGGGGCTCACGGCATGGGCAGCCAGCCGTCAAGCTTGGCAGTTGTCAGGGGCTA TCCCATTCCCAGTCGCTGTCCATGAGCACCACCAACATGGCTATCGGGGACATGA CTGGCAGCATGGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCT **ACCAAACCGTGGGCTTCAGTCAGCAAGACACGAAAGCTGGTTCATTCTCTATTTC** ATCAGGTGACAAGCACAGTGGACAGCCTCGACAGGCCATGACCTGGAAGGGGTACA CAAGTATCATTCAGAACCTTTCCCATAGCTCCTCCGCCTCACCACGCCTCGGGC AGTCAGGACAGCTCAGTGACACAAGTCAGACCTGCAGGGTGAATGGTATCAAGAT 1GAAAGGGCAGCCCCATCCGCTGTGCTAATCTGCAGAATTACTCTGGTCAGTT CCAGCTGCCTGCTACAGGGGACCAGCGCCAAAAACTCTGAGTTACTTTCCCCAGG **JAAGTATTATTCAGAACCTTTCCCACAGCTCCTCCCGTCTCCACCACTCCGCGGGC**

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This invention describes a novel method for determining the degree of methylation of a particular cytosine in a motif 5' cpG-3', present in a genomic sample of DNA. The sample is treated chemically to convert cytosine (C) but not methylated C, to uracil, then part of the genomic DNA that contains the target C is amplified to form a labeled amplicon. The amplicon is hybridised to two classes, each with at least one member, of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the degree of hybridisation to both classes is determined from the label on the amplicon. From the ratio of labels hybridised to the two classes of oligomers, the degree of methylation is calculated. The method is used: (1) for diagnosis and/or prognosis of side effects of therapeutic drugs and of a wide range of diseases, e.g. cancer, disorders
                                                                                                                                                                                                                                                      4806 ATCCCTCCCATTCCCAATCCCTATCCATGGGCACCACCAACATGGCTATCGGGGATATGA 4865
                                    4743 GTTCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGCTT 4802
                                                       4803 TAGGAAAAAAAGACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGACTT 4862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          drug; side effect; cancer; central nervous system; cardiovascular; gastrointestinal; respiratory system; single nucleotide polymorphism; SNP; cell differentiation; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide for detecting cytosine methylation SEQ ID NO 2171.
                                                                                                                                                                                  Determining the degree of cytosine methylation in genomic DNA, use for diagnosis and prognosis, comprises selective hybridization of amplicons from chemically treated DNA \,
                                                                                                                                    4926 TAGGCAAGGAGGACCACAAACACAAAGACTGAAATGACTTGGGA--
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                                                                                                                                                                                                                                                                                                                                 4983 -GGGAGAACTGTCTTCCATTTCAG 5006
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-SEP-2001; 2001WO-EP10074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-SEP-2000; 2000DE-1043826.
05-SEP-2000; 2000DE-1044543.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS AG
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of the central nervous, cardiovascular, gastrointestinal and respiratory systems etc., particularly by detecting mutations or single nucleotide polymorphisms (SNP's); and (ii) for differentiation of cell or tissue types and for investigating cell differentiation. The method allows the methylation status of many C residues to be determined simultaneously. ABQ13410-ABQ54121 represent genomic DNA sequences used to illustrate the method for determining the degree of cytosine methylation described in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3288
                                                                                                                                                                                                                                                               2989 TGCAGCGACGGGGGAGCCCACGGCTACGGGCGGCGCCACCTGCAGCCGCACGATGCGCTG 3048
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                                                                                                                                                                                                                                                                                                                                                       312 AACTTCCACTCGTCCCCCTATCCTCCCAACATCACGAAAACGTCACCTAAAATCCCTA
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                                                                                                                                                                                                                                                                                                                                                                                                       3109 CCTCGTGTGCCGCGCTTCAGCAGCCTCAGCAGCTGCAACCCCCCGGCGATGGCCACGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        372 GCGAAAAAACGCAATCTCGTACTTCAAAATTACACGCGGACCCGAAAACGACCAATCCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3229 AACTTCCACTCGTCCCCCTGTCCTCCCAGCATCACCGAGAACGTCACCTGGAGTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             252 ACCATAAACGCTAATACCAACCTAAACGATAAAAATTTCCTACCGAACGACGTAATACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3409 GACAGCAAAGTGCCCCACGGGCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCAC
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0
                                                                                                                                                                                            Score 366; DB 24; Length 557;
Pred. No. 2.4e-72;
                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 557 BP; 75 A; 52 C; 205 G; 225 T; 0 other;
                                                                                                                                                                                                                                0; Mismatches 115;
                                                                                                                             the disclosure of the invention.
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Best Local Similarity 79.1%;
Matches 435; Conservative
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drug; side effect; cancer; central nervous system; cardiovascular; gastrointestinal; respiratory system; single nucleotide polymorphism; SNP; cell differentiation; ds.

Homo sapiens

cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;

Human;

Determining the degree of cytosine methylation in genomic DNA, useful for diagnosis and prognosis, comprises selective hybridization of

Guetig D;

Berlin K,

Piepenbrock C,

Olek A,

WPI; 2002-371829/40

(EPIG-) EPIGENOMICS

01-SEP-2001; 2001WO-EP10074 01-SEP-2000; 2000DE-1043826 05-SEP-2000; 2000DE-1044543

WO200218632-A2

07-MAR-2002

Claim 12; 56pp + Sequence Listing; 56pp; German.

amplicons from chemically treated DNA

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This invention describes a novel method for determining the degree of methylation of a particular cytosine in a motif 5'-CpG-3', present in a genomic sample of DNA. The sample is treated chemically to convert cytosine (C) but not methylated C, to uracil, then part of the genomic cytosine (C) but not methylated C, to uracil, then part of the genomic cytosine (S) but not methylated C, to uracil, then part of the genomic DNA that contains the target C is amplified to form a labeled amplicon. The amplicon peptide and/or peptide-nucleic acid (PNA) oligomers and the degree of hybridisation to both classes is determined from the member, of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the degree of hybridisation to both classes is determined from the lasses of oligomers, the degree of methylation is calculated. The method is used: (i) for diagnosis and/or prognosis of side effects of the represent crugs and of a wide range of diseases, e.g. cancer, disorders of the central nervous, cardiovascular, gastrointestinal and respiratory systems etc., particularly by detecting mutations or single nucleotide polymer phisms (SNP s); and (ii) for differentiation. The method allows the methylation status of many C residues to be determined simultaneously.

Supply and for investigating cell differentiation. The method allows the method for determining the degree of cytosine methylation described in the disclosure of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2989 TGCAGCGACGGGGGAGCCCACGGCTACGGGCGCCGCCACCTGCAGCCGCACGATGCGCTG 3048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3169 GCGGAGAAGCGCAGTCTCGTGCTTCAGAATTACACGCGGCCCGAGGGCGGCCAGTCCCGA 3228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3289 ACCATGGACGCTGATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGACGTGGTGCAG 3348
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3049 GGCCACGCCTGAGGAGGCCAGCGACCCGGTGCGGACAGGCTCCGAGGGCCTGGCCTG 3108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3109 CCTCGTGTGCCGCGCTTCAGCAGCTCAGCAGCTGCAACCCCCGGCGATGGCCACGTCC 3168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3229 AACTICCACICGICCCCCIGICCICCCAGCAICACGAGAACGICACCIGGAGICCCIG 3288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246 AACTICCACTCGTCCCCCTAICCTCCCCAACAICAGGAAAACGTCACCCTAAAAICCCTA 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           306 ACCATAAAAGGCTAAATACCAAACGATAAAAAAATTTCCTACCGAACGAGGTAATACAA 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         186 GCGAAAAAAACGCAATCTCGTACTTCAAAATTACACGCGGACCGGAAAACGACCAATCCCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7.2%; Score 366; DB 24; Length 557; 79.1%; Pred. No. 2.4e-72;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 557 BP; 225 A; 205 C; 52 G; 75 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 115;
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Matches 435; Conservative
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Gaps

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65

185

Score 334.8; DB 24; Length 3635; Pred. No. 4.9e-65;

6.6%;

Best Local Similarity

Query Match

Sequence 3635 BP; 786 A; 1140 C; 989 G; 719 T; 1 other;

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The present invention relates to agents for the promotion of bone and cartilage formation which contain as the active component a Glil protein or a DNA encoding a Glil protein. The agents can be used in the prevention, treatment and diagnosis of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis, osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, and defects in cosmetic and therapeutic bone transplantation. The present sequence is a murine Glil coding sequence described in the exemplification of the invention.
                                                                                               GCTGGCCAGCAGTTCCATGCCCTCGAGCCCTGCCCGGAGGGCAGCAAAACCGACCTG 3528
                                         GACAGCAAAGTGCCCCACGGGCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCAC 3468
Glil; screening method; bone induction; cartilage induction; orthopaedic disease; dental disease; osteoporosis; hyperosteogenesis; osteopathic; antiarthritic; vulnerary; immunosuppressive; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Promotion of bone and cartilage formation using Glil protein or DNA encoding it for treatment of skeletal disorders
                                                       Murine Glil coding sequence SEQ ID NO: 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 6; Page 88-89; 154pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                               hyperchondrogenesis; gene; mouse; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers 213..3548
                                                                                                                                                                                                                                                      BP.
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/product= "Gli1"
                                                                                                                                                                                                                                                      AAL45541 standard; cDNA; 3635
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P-PSDB; AA017108.
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                                                                                                                                             1816 TCAAATGCCTCTGATCGCGCCAAACACCAAAACAGAACGCATTCCAATGAGAAACCATAT 1875
                                                                                                                                                                                                                                                                                                                                                                                                 771 GATATGATGGTTGGCAAGTGCCCGGAGGACCCTTTGGAAGGGGACATGTCTAGCCCCAAC 830
  Gaps
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                                                                                                                                                         1396 GCTCGGGGGCAGCAGGAACAGCCCGAAGGAACAACCCTTGTCAAGGAGGAAGGGGACAAA
                                                                                TCCACAGGCACACAGGATCACCTGTTGGGGATGCTGGATGGGCGGGGGGAGCTGGAGAGA
                                                                                                                 1008 GGGGAGCGGAAGGAATTCGTGTGCCATTGGGGAGGTTGCTCCAGGGAGCTGAGGCCCTTC
                                                                                                                                                                                                                              AAAGCCCAGTATATGTTGGTAGTGCATATGAGAAGACACACGGGCGAGAAGCCTCACAAA
                                                                                                                                                                                                                                                                      TGCACTTTTGAAGGTTGCACAAAGGCCTACTCGAGACTAGAAAACTTGAAAACACACTTG
                                                                                                                                                                                                                                                                                                                AGATCTCACACTGGAGAAACCATACGTCTGTGAGCACGAAGGTTGCAACAAGGCTTTC
                                                                                                      GATGAAAGCAAACAGGAGCCTGAAGTCATCTATGAGACAAACTGCCACTGGGAAGGCTGC
                                                                                                                                                                                    GGAGAGAAGAAGGAGTTCGTGTGCAGGTGGCTGGACTGCTCAAGAGAGCAGAAACCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; GLI-1; Sonic hedgehog-patched signalling pathway; cancer; differentiation; tissue development; ss.
 3;
 Mismatches 192; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GLI-1 nucleotide sequence SEQ ID NO:27.
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463;
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The present invention describes peptides consisting of fragments of GLI-1 and SUFUH, respectively which are able to specifically bind to SUFUH and GLI-1, respectively. GLI-1 and SUFUH are components which interact in the Sonic hedgehog (Shh) patched (Ptch) signalling pathway. The present invention also describes: (1) DNA sequences encoding the peptides; and invention also describes: (1) DNA sequences encoding the peptides; and peptides. The peptides have sytostatic activity, and can be used as Shh-Ptch signalling pathway modulators. The peptides and monoclonal antibodies against them can be used for preparing a pharmaceutical composition for treating cancer. The peptides on contact with the GLI-1 and ShFUH in vivo affects the Shh-Ptch signalling pathway which is used in the treatment of cancer. The peptides comprising the peptide fragments
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1372 GATGAAGACCTCCCCAGCCCAGGGGCTCGGGGGCAGCAGGAACAGCCCGAAGGAACAACC 1431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel peptides comprising fragments of two components of sonic hedgehog-patched signaling pathway, GLI-1 and SUFUH, useful for treating cancer and diseases influencing cell differentiation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            586 GAAGGTGATATGTCCAGCCCCAACTCCACAGGCATACAGGATCCCCTGTTGGGGATGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1432 CTTGTCAAGGAGGAAGGGGACAAAGATGAAAGCAAACAGGAGCCTGAAGTCATCTATGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1612 TGCTCAAGAGGAGCAGAAACCCTTCAAAGCCCAGTATATGTTGGTAGTGCATATGAGAAGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1672 CACACGGGCGAGAAGCCTCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTCGAGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.5%; Score 329.4; DB 22; 70.6%; Pred. No. 7.7e-64; ative 0; Mismatches 186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in an example from the present invention.
                                                                                                                                                                Example 3; Page 111-112; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 454; Conservative
                   2001-211199/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                     treating cancer and
tissue development
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1;

δλ qq AAD12302 standard; cDNA; 3600

RESULT 8 AAD12302 AAD12302;

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Transgenic non-human animal useful as basal cell carcinoma model system to identify anti-cancer drug candidates, overexpresses transgene encoding GLI-1 protein which is a human homolog to Cubitus interruptus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a transgenic non-human animal comprising a transgene containing a nucleic acid encoding a human cubitus interruptus (Ci) homologue protein, GLI-I. The transgenic non-human animal is useful as basal cell carcinoma (BCC) model system since it overexpresses GLI-I which leads to development of tumours resembling human BCC. Thus it is also useful for screening anti-cancer drug candidates and evaluating whether it affects BCC, trichoepitheliomas, cylindromas and trichoblastomas. The present sequence is a CDNA encoding human Ci homologue protein, GLI-I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1432 CTTGTCAAGGAGGAAAGGACAAAGATGAAAGCAAAACAGGAGCCTGAAGTCATCTATGAG 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1372 GATGAAGACCTCCCCAGCCCCAGGGGTCGGGGCAGCAGGAACAGCCCGAAGGAACAACC 1431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; transgenic non-human animal; Cubitus interruptus; Ci; GLI-1;
                                                                                                                              basal cell carcinoma; BCC model system; tumour; screening;
anti-cancer; trichoepithelioma; cylindroma; trichoblastoma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 6.5%; Score 329.4; DB 22; Length 3600; Best Local Similarity 70.6%; Pred. No. 7.9e-64; Matches 454; Conservative 0; Mismatches 186; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3600 BP; 785 A; 1161 C; 949 G; 705 T; 0 other;
                                                                                                                                                                                                                                                                      /product= "Human Ci homologue, GLI-1"
                                                                                Human Cubitus interruptus (Ci) homologue, GLI-1 cDNA
                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 6; Page 25-26; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                             (KARO-) KAROLINSKA INNOVATIONS AB.
                                                                                                                                                                                                                                                                                                                                                                          02-FEB-2001; 2001WO-SE00204
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P-PSDB; AAE06644.
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                                                                                                                                                                                      Homo sapiens
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CATATAAATAACGACCATATTCATGGAGAAGAAGGAGTTCGTGTGCAGGTGGCTGGAC 1611
                                                                            TGCTCAAGAGAGCAGAAACCCTTCAAAGCCCCAGTATATGTTGGTAGTGCATATGAGAAGA 1671
                                                                                                                        1672 CACACGGGCGAGAAGCCTCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTCGAGA 1731
                                                                                                                                   1852 ACGCATTCCAATGAGAAACCATATGTGTGCAAAATCCCAGGCTGCACTAAGCGTTACACA 1911
                                                                                                                                                                                                                                                                                                        GACCCAAGCTCCCTCCGGAAACATGTGAAGACAGTGCATGGCCCAGAGGCTCATGTCACC 1971
                                                                                        Gl11; screening method; bone induction; cartilage induction; orthopaedic disease; dental disease; osteoporosis; hyperosteogenesis; osteopathic; antiarthritic; vulnerary; immunosuppressive; human;
841 CACATCAACAGCGAGCACATCCACGGGGAGCGGAAGGAGTTCGTGTGCCACTGGGGGGGC
                                                                                                                                                                                                                CACGAAGGTTGCAACAAGGCTTTCTCAAATGCCTCTGATCGCGCCAAACACACAGA
                                                                                                                                                                   CTAGAAAACTTGAAAACACACTTGAGATCTCACACTGGAGAGAAACCATACGTCTGTGAG
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79..3399
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P-PSDB; AA017109.
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                                                                                                     The present invention relates to agents for the promotion of bone and cartilage formation which contain as the active component a Gill protein as a DNA encoding a Gill protein. The agents can be used in the prevention, treatment and diagnosis of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis, osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, and for use in cosmetic and therapeutic bone transplantation. The present sequence is a human Gill coding sequence described in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1372 GATGAAGACCTCCCCAGCCCCAGGGCTCGGGGGCAGCAGGAACAGCCCGAAGGAACAACC 1431
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Promotion of bone and cartilage formation using Glil protein or DNA
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                                                                                                                                                                                                                                                                                                                                                                           h 6.5%; Score 329.4; DB 24; Length 3600;
Similarity 70.6%; Pred. No. 7.9e-64;
54; Conservative 0; Mismatches 186; Indels 3;
                                                                                                                                                                                                                                                                                                                                    Sequence 3600 BP; 785 A; 1161 C; 949 G; 705 T; 0 other;
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                                                                6; Page 100-101; 154pp; Japanese.
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cartilage formation which contain as the active component a G111 protein or a DNA encoding a G111 protein. The agents can be used in the prevention, treatment and diagnosis of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis, osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, bone defects, dental disease, hyperosteogenesis and hyperchondrogenesis, and for use in cosmetic and therapeutic bone transplantation. The present sequence is a human G111 coding sequence described in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1372 GATGAAGACCTCCCCAGCCCAGGGGCTCGGGGGCAGCAGGAACAGCCCGAAGGAACAACC 1431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               664 GAAGGTGATATGTCCAGCCCCAACTCCACAGGCATACAGGATCCCCTGTTGGGGATGCTG 723
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.5%; Score 329.4; DB 24; Length 3600; 70.6%; Pred. No. 7.9e-64;
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                                                                         screening method; bone induction; cartilage induction;
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                                       Human Glil coding sequence SEQ ID NO: 14.
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                                                                                                                                                                                                    Location/Qualifiers
79..3399
                                                                                                                                                                                                                                                        /product= "Glil"
                                                                                                                                hyperchondrogenesis; gene; ss
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11-JUN-2002 (first entry)
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                                                                                                                                                                  Homo sapiens,
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AAL45543 standard; cDNA; 3600

RESULT 10 AAL45543 ID AAL4 AAL45543;

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Copied from PCTUS2003092 on 04-03-2004
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Homo sapiens

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The present invention relates to agents for the promotion of bone and cartilage formation which contain as the active component a Glil protein or a DNA encoding a Glil protein. The agents can be used in the prevention, treatment and diagnosis of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis,
                                                                                                                                        1141 ACCCATTCCAATGAGAAGCCGTATGTATGTAAGCTCCCTGGCTGCACCCAAACGCTATACA 1200
1672 CACACGGCGAGAAGCCTCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTCGAGA 1731
                                                                                                                                                                                                                                              1912 GACCCAAGCTCCCTCCGGAAACATGTGAAGACAGTGCATGCCCAGAGGCTCATGTCACC 1971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glil; screening method; bone induction; cartilage induction; orthopaedic disease; dental disease; osteoporosis; hyperosteogenesis; osteopathic; antiarthritic; vulnerary; immunosuppressive; human;
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                                                                                      1021 CTCGAAAACCTGAAGACGCACCTGCGGTCACACACGGGTGAGAAGCCATACATGTGTGAG
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/product= "Gli1"
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osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, bone defects, dental disease, hyperosteogenesis and hyperchondrogenesis, and for use in cosmetic and therapeutic bone transplantation. The present sequence is a human Glil coding sequence described in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961 CACACTGGCGAGAAGCCACACAAGTGCACGTTTGAAGGGTGCCGGAAGTCATACTCACGC 1020
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glil; screening method; bone induction; cartilage induction; orthopaedic disease; dental disease; osteoporosis; hyperosteogenesis; osteopathic; antiarthritic; vulnerary; immunosuppressive; human;
                                                                                                                                                                                                                                                                                                               724 GATGGGCGGGAGGACCTCGAGAGAGAGAGGGA---GAAGCGTGAGCCTGAATCTGTGTATGAA 780
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                                                                                                                                                                           Gaps
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                                                                                                                                    Score 329.4; DB 24; Length 3600;
Pred. No. 7.9e-64;
                                                                                                                                                                       0; Mismatches 186; Indels
                                                                                                       Sequence 3600 BP; 786 A; 1161 C; 948 G; 705 T; 0 other;
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                                                                                                                                                         Best Local Similarity 70.6
Matches 454; Conservative
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The present invention relates to agents for the promotion of bone and cartilage formation which contain as the active component a Glil protein or a DNA encoding a Glil protein. The agents can be used in the prevention, treatment and diagnosis of bone and cartilage disorders including bone fractures, joint deformation, osteoarthritis, osteoporosis, cartilage damage, trauma, bone formation defects, cartilage formation defects, in cosmetic and therapeutic bone defects, dental disease, hypercosteogenesis and hyperchondrogenesis, and for use in cosmetic and therapeutic bone transplantation. The present sequence is a human Glil coding sequence described in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1372 GATGAAGACCTCCCCAGGGGCTCGGGGGCAGCAGGAACAGCCCGAAGGAACAACC 1431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Promotion of bone and cartilage formation using Glil protein or DNA encoding it for treatment of skeletal disorders
                                                                                                                                                                  /transl_except= (pos:2416..2599.aa:Trp)
/note= "there is an apparent 180 nuclectide
insertion between residues 780 and 781 of the Glil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATATAAATAACGACCATATTCATGGAGAGGAGGAGGAGTTCGTGTGCAGGTGGCTGGAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches 186; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3600 BP; 785 A; 1162 C; 948 G; 705 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 329.4; DB 2 Pred. No. 7.9e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 6; Page 123-125; 154pp; Japanese.
                                       Location/Qualifiers 79..3399
                                                                                                                                       /product= "Glil"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-AUG-2001; 2001WO-JP06688.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-AUG-2000; 2000JP-0242767
THE KEY TOCATION/OUTER CDS 79..339 A ** TAGE CDS 79..339 A ** TAGE
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glioma-associated oncogene-1. The antisense compounds are useful for inhibiting the expression of human glioma-associated oncogene-1 in human cells or tissues and for treating an animal, particularly a human suspected of having or being prone to a disease or condition associated with expression of glioma-associated oncogene-1. The compounds are useful for diagnostics, therapeutics and as research reagent, e.g. prophylactically to prevent or delay infection, inflammation or
                                                                                                                                 1201 GATCCTAGCTCGCTGCGAAAACATGTCAAGACAGTGCATGGTCCTGACGCCCATGTGACC 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel antisense compounds targeted to nucleic acids encoding glloma-associated oncogene-1, for modulating the gene expression and treating diseases associated with expression of the oncogene in humans
1021 CTCGAAAACCTGAAGACGCACCTGCGGTCACACGGGTGAGAAGCCATACATGTGTGAG 1080
                                      CACGAAGGTTGCAACAAGGCTTTCTCAAATGCCTCTGATCGCGCCAAACACCAAAACAGA 1851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to antisense compounds and methods for modulating the expression of human glioma-associated oncogene-1. The antisense compounds, particularly antisense oligonucleotides (ABK30509-ABK30586), target and inhibit the expression of human
                                                         ACGCATTCCAATGAGAAACCATATGTGTGCAAAATCCCAGGCTGCACTAAAGCGTTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; glioma-associated oncogene-1 associated disease; infection;
                                                                                                                                                                                  GACCCAAGCTCCCTCCGGAAACATGTGAAGACAGTGCCATGGCCCAGAGGCTCATGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product= "Glioma-associated oncogene-1 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammation; tumour formation; cytostatic; antiinflammatory;
                                                                                                                                                                                                                                                                              1972 AAGAAGCAGCGAGGGACATCCATCTTCGGCCGCCACCCCCGA 2014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human glioma-associated oncogene-1 DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF, Wyatt J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-138363/18.
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XX Grug;
KW Grug;
KW Grug;
KW GBStr
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                                                                                                                              drug; side effect; cancer; central neg
gastrointestinal; respiratory system;
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                                                  Homo sapiens.
                                                                                                                                                                                Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
                                                                                                                                                                                                                                        Oligonucleotide for detecting cytosine methylation SEQ ID
                                                                                                                                                                                                                                                                                                                                                        ABQ15578;
                                                                                                                                                                                                                                                                                                                                                                                                           ABQ15578 standard;
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                                                                                                                                                                                                                                                                                                   12-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
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                                                                                                          cell differentiation; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATCCTAGCTCGCTGCGAAAACATGTCAAGACAGTGCATGGTCCTGACGCCCATGTGACC
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                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                              central nervous system; cardi
ory system; single nucleotide
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Pred. No. 7.9e-64;
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                TGCAGTATTTAAATTCCCAGAACCAAGCAGGGTACGAGCAGCACTTCCCCAGCGCCCTCC
                                                                      TTTTGATTATGGACGTTGATGTTAATTTGAACGATGAGGATTTTTTTGTCGGACGACGTGG
                                                                                                                           CCCTGACCATGGACGCTGATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGACGTGG
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                                                                                                                                                                                                                                                                                        CGTTCGCGGAGAAGCGTAGTTTCGTGTTTTAGAATTATACGCGGTTCGAGGGCGGTTAGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTGGGCCACGGCGTGAGGAGGGCCAGCGACCCGGTGCGGACAGGCTCCGAGGGCCTGG 3103
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The amplicon is hybridised to two classes, each with at least one commender, of cligonucleotides and/or peptide-nucleic acid (PNA) oligoners and the degree of hybridisation to both classes is determined from the classes of cligoners, the degree of methylation is calculated. The method classes of cligoners, the degree of methylation is calculated. The method classes of cligoners, the degree of methylation is calculated. The method classes of cligoners, the degree of methylation is calculated. The method cligoners is sed: (i) for diagnosis and/or prognosis of side effects of cligoners cardiovascular, gastrointestinal and respiratory confidences and of a wide range of diseases, e.g. cancer, disorders confidence to the central nervous, cardiovascular, gastrointestinal and respiratory confidences and for investigating cell differentiation of cell or tissue types and for investigating cell differentiation. The method allows the method for determining the degree of cytosine methylation described in cutoff the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel method for determining the degree of methylation of a particular cytosine in a motif 5'-CpG-3', present in a genomic sample of DNA. The sample is treated chemically to convert cytosine (C) but not methylated C, to uracil, then part of the genomic DNA that contains the target C is amplified to form a labeled amplicon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining the degree of cytosine methylation in genomic DNA, for diagnosis and prognosis, comprises selective hybridization amplicons from chemically treated DNA -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          drug; side effect; cancer; central nervous system; gastrointestinal; respiratory system; single nucleone; cell differentiation: As
                 of the central nervous, cardiovascular, gastrointestinal and respiratory systems etc., particularly by detecting mutations or single nucleotide polymorphisms (SMP's); and (ii) for differentiation of cell or tissue types and for investigating cell differentiation. The method allows the methylation status of many C residues to be determined simultaneously. ABQ13410-ABQ54121 represent genomic DNA sequences used to illustrate the method for determining the degree of cytosine methylation described in
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05-SEP-2000;
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side effect; cancer; central nervous system; cardiovascular;
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                                                                                                                                     CGGACGACAGCAAAGTGCCCCACGGGCCCGGGTGACTTTGACGCGCCCGGGCTGCCAGACA
                                                                                                                                                                                                                                                                                                                                                                         CGTCCGCGAGAAACCGCAGTCTCCGTGCTTCAGAATTACACGCCGGCCCGAGGGGGGGCCAGT
                  ACCTGCCCATTCAGTGG
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                                                                                                                                                                                            TGCAGTATTTAAATTCCCAGAACCAAGCAGGGTACGAGCAGCACTTCCCCCAGCGCCCTCC
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ATTTGTTTATTTAGTGG
                                                            GTTACGTTGGTTAGTATTTTATGTTTTTCGAGTAGTTTTGTTTCGAGGGTAGTAAAATCG
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Copyright (c) 1993 - 2002
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/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
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US-09-657-042A-3
US-09-657-045A-3
US-09-172-045-1
US-09-172-045-1
US-08-232-463-14
US-09-132-463-1
US-09-103-840A-2
US-09-103-843-93-2
US-09-359-520A-2
US-09-359-520A-2
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US-09-369-618-1
US-08-474-933-1
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US-09-369-618-1
US-09-369-618-7
US-08-486-273A-57
US-08-486-273A-57
US-08-940-035A-57
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US-08-998-416-861

US-09-178-109-3

US-09-142-791A-1

US-09-142-791A-1

US-09-142-791A-1

US-09-142-791A-1

US-09-18-109-1

PCT-US92-06840-1

US-09-504-358-19

US-09-954-314-19

US-09-954-314-19

US-09-954-314-19

US-09-954-314-19

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    -TCAAGGAGGAAGGGGACAAAGATGAAAG 1463
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Database

Issued_Patents_NA:*
1: /cgn2_6/ptodata/1,
2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
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Post-processing: Minimum Match 0%
Maximum Match 100%

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Minimum Total number

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seq seq

length: 0 length: 2000000000

Title: Perfect score:

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Scoring table: Sequence:

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                                        Sequence 3, Application US/09657042A Patent No. 6329203 GENERAL INFORMATION:
        APPLICANT: C. Frank Beni
APPLICANT: Jacqueline Wyatt
TITLE OF INVENTION: ANT
FILE REFERENCE:
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_ = _ 2471 1806 2411 1866 CURRENT APPLICATION NUMBER: US/09/657,042A

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1285 1105 2181 1462 1345 1881 1225 1165 1701 1045 1464 1747 2352 1687 2295 1627 2235 1567 1507 2121 2061 1405 2001 1941 1821 1641 1581 1521 985 925 865 TGCCTCTGATCGCGCCAAACACCAAAACAGAACGCATTCCAATGAGAAACCATATGTGTG TTTTGAAGGTTGCACAAAGGCCTACTCGAGACTAGAAAACTTGAAAACACACTTGAGATC CCAGTATATGTTGGTAGTGCATATGAGAAGACACACGGGCGAGAAGCCTCACAAATGCAC TAAGCAGGAGGCTGAGGTCGTCTATGAGACCAACTGCCACTGGGAAGACTGCCACCAA CAAACAGGAGCCTGA----AGTCATCTATGAGACAAACTGCCACTGGGAAGGCTGCGCGAG GCTCGAGCTTCCTCTGACCGATGGAGGGTATAGGAGACCTCAGTGCCATCGATGAAAC TCAGTCTTCATGCAGCCAACAGTCCCCCATCAGCAACTATTCCA-----ACAGTGG CCTCCAGGTGAAAACCGTCAAGGCAGAGAAGCCAATGACATCTCAGCCAAGCCCTGGTGG TCACACTGGAGAGAAACCATACGTCTGTGAGCACGAAGGTTGCAACAAGGCTTTCTCAAA 1820 GTTCGAGGGCTGCTCGAAGGCCTACTCCCGCCTGGAGAACCTGAAGACACCTGCGGTC GCAGTACATGCTGGTGGTGCACATGCGGCGACACACGGGCGAGAAGCCCCACAAGTGCAC CAAGGATTCCTGCTCATGGGCCGGGCCGACTCCACACGCGGAACACCAAGCTGCCTCC GAATGGAATGTTTCCGCGACTGAACCCCCATTCTACCCCCTAAAGCCCCCTGCGGTCTCTCC GAGAAACCCGGCAGGGACCAAATGGATGGAGCACGTAAAACTAGAAAGGCTAAAACAAGT ACCCCCAGGGGCCGACACCTCAGCCCTGGCTGCCCCCTCCGCTGGTGGCCTCCAGCTGCG CCCAATCATGGACTCAACCATTTCC---ACTGCAACCACAGCCCTTGCTTTGCAAGCCAG CGTGGAGATGCCGGGGACGGGGCCCGGGAGCCTGGGAGACCTGACGGCACTGGATGACAC CCAGTCGTCCTGCAGCAGCGAGCCCTCTCCTCTGGGCAGTGCCCCCAACAATGACAGTGG CCTGCACGTCAGAGCCATCAAGACCGAGAGCTCCGGGGCTGTGTCAGTCCAGCCCCGGGGC TCAGGGAGCCCTTGGTGAGCAGCAGGACCTCAGCAACACTACCTCAAAGCGGGAAGAATG CACACCGCTGCTCAAAGAGAATGGGGACAGTGAGGCCGGCACGGAGCCTGGCGGCCC---AACGGTCCACGGCCCAGATGCCCACGTCACCAAGAAGCAGCGCAATGACGTGCACCTCCG CAAGATCCCAGGCTGCACCAAGAGATACACAGACCCCAGCTCTCTCCGGAAGCATGTGAA CGCCTCGGACCGCGCCAAGCACCAGAATCGCACCCACTCCAACGAGAAACCCTACATCTG GAAGAAGGAGTTTGTGTGCCGCTGGCAGGCCTGCACGCGGGAGCAGAAGCCCCTTCAAGGC GGAGTACGACACCCAGGAGCAGCTGGTGCATCACATCAACAACGAGCACATCCACGGGGA --AGAGAGCACCGAGGCAGCAGCCAGGCCGTGGAGGACTG 1746 1686 2294 1626 2234 1566 2180 1506 2120 1461 2060 1404 2000 1344 1940 1284 1880 1224 1760 1104 1044 1640 984 1580 1520 2351

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; NAME/KEY: CDS ; LOCATION: (79)...(3399) US-09-657-042A-3

ORGANISM: Homo sapiens FEATURE:

SEQ ID NO

TYPE: DNA

3600

CURRENT FILING DATE:
NUMBER OF SEQ ID NOS:
SEQ ID NO 3

2000-09-08

Query Match Best Local S Matches 454

/ Match 6.5%;
Local Similarity 70.6%;
nes 454; Conservative

Score 329.4; I Pred. No. 7.9e-0; Mismatches

); DB 4; 7.9e-68; nes 186;

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1372 GATGAAGACCTCCCCAGCCCAGGGGGCTCGGGGGGCAGCAGGAACAGCCCGAAGGAACAACC 1431
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; NAME/KEY: CDS
; LOCATION: (138)..(1463)
US-09-172-045-1
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; LOCATION: (0)...(0)
; OTHER INFORMATION: Zic 1 Protein gene; Genbank Acession D76435
US-09-234-332-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09172045 Patent No. 6277594
                                                                                                                                                               \begin{array}{c} {\tt SOFTWARE: \ PatentIn \ Ver. \ 2.0} \\ {\tt SEQ \ ID \ NO \ 1} \end{array}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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SEQ ID NO 5
LENGTH: 3138
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Best Local Similarity 54.9%;
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Nakata, Katsunori
TITLE OF INVENTION: Neurogenesis Inducing
FILE REFERENCE: Hiraki-03497
                                                                                                                                                                                                           EARLIER APPLICATION NUMBER: JP98/121456 EARLIER FILING DATE: 1998-04-30 NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                EARLIER APPLICATION NUMBER: JP98/86979 EARLIER FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/172,045 CURRENT FILING DATE: 1998-10-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Mikoshiba,
APPLICANT: Aruga, Jun
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SOFTWARE: FastSEQ for Windows Version
                                                                                        ORGANISM: Xenopus
                                                                                                                   TYPE: DNA
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Nagai, Takeharu
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US-09-234-332-5 Sequence 5, Application US/09234332A ; Patent No. 6087168 ; GENERAL INFORMATION:

APPLICANT: Cedars-Sinai Medical Center
APPLICANT: Michel F. Levesque, M.D.
APPLICANT: TOomas Neuman, Ph.D.
TITLE OF INVENTION: CONVERSION OF NON-NEURONAL CELLS INTO
TITLE OF INVENTION: NEURONS; TRANSDIFFERENTIATION OF EPIDE
FILE REFERENCE: PO7 41494
CURRENT APPLICATION NUMBER: US/09/234,332A

CURRENT FILING DATE: 1999-01-20

Вþ Qy В δÃ 망 Ş 멍 Qy

AAGAAGCAGCGAGGGGACATCCATCCTCGGCCGCCACCCCCCGA 2014

AAACGGCACCGTGGGGATGGCCCCCTGCCTCGGGCACCATCCA 1303

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                                                                                                                                                                                                         Sequence 14, Application US/08232463 Patent No. 5670367
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Tocal Similarity
Conserv
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TELEX: 899149
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                GENERAL
                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
                                                                                                                                                             APPLICANT: DORNER, F. APPLICANT: SCHEIFLINGER, APPLICANT: FALKNER, F. G
 CURRENT
                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                         1412 YYYYYYYYYYYYYYYYYYYYYYGTACCAAATTCTTCTATC: 1452
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                                                                ZIP:
          SOFTWARE:
                                                                          COUNTRY:
                                                                                      STATE:
                                                                                              CITY: Alexandria
                                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLONE:
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ARE: PatentIn Release #1.0, APPLICATION DATA:
                                                                 22313-0299
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                                                                                                           Suite
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           Version #1.
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CTCAGGGTACGAATCTGCTACCCCACCAGCAATGGTTTCTGCCAAC 1361
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                                                             AGGGGACATCCATCCTCGGCCGCCACCCCCGAGAGATTCCGGCAGC
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: BENT, Stephen A. REGISTRATION NUMBER: 2
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RESULT 5 US-08-232-463-14

Sequence 14, Application US/08232463 Patent No. 5670367

GENERAL INFORMATION: APPLICANT: APPLICANT: APPLICANT:

DORNER, F

CORRESPONDENCE ADDRESS:

ADDRESSEE:

3: Foley & Lardner 1800 Diagonal Road

Road,

Suite

Alexandria

۷A

NUMBER OF SEQUENCES:

APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS

PRIOR APPLICATION DATA:
APPLICATION NUMBER:

CLASSIFICATION: 435 FILING DATE APPLICATION NUMBER:

APPLICATION NUMBER: FILING DATE:

EP 91 114 300.6 US/07/935,313

DATE:

ATTORNEY/AGENT

INFORMATION: 26-AUG-1991 SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:

PatentIn Release #1.0, Version

#1.25

US/08/232,463

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

COUNTRY: USA ZIP: 22313-0299

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

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Query Match

Local Similarity

1.6%;

Score 83.2; DB 4; Pred. No. 4.4e-10;

DB 4;

Length 2364;

Matches

271;

Conservative

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Mismatches 243;

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845

1566

905

FILING DATE APPLICATION NUMBER:

US/08/232,463

STATE: IL COUNTRY: US ZIP: 61604

USA

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RESULT 7
US-07-945-283-1/c
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                                                                                                                                                    Sequence 1, Application US/07945283
Patent No. 5352596
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                                                                                                                                         GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
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                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Curtis P. Ribando
                                                                                                                                                                                                                                                                                     1677
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
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PRIOR APPLICATION DATA:
                                                                          TITLE OF INVENTION:
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LENGTH: 7218 base pairs
                                                             NUMBER OF SEQUENCES:
                                                                                                         APPLICANT: Cheung, APPLICANT: Wesley,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: EP 91 114 300.6 FILING DATE: 26-AUG-1991
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                STREET:
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                                                                                                                                                                                                                                                    RRRRRRRRRRATCGCAAGCTCCCT 1053
                                                                                                                                                                                                                                                                                  GGGCGAGAAGCCTCACAAATGCACT 1701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCCACTGGGAAGGCTGCGCGAGGGAGTTCGACACCCAAGAGCAGCTTGTGCACCATAT 1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGAGGAAGGGGACAAAGATGAAAGCAAACAGGAGCCTGAAGTCATCTATGAGACAAA 1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAGAGCAGAAACCCTTCAAAGCCCAGTATATGTTGGTAGTGCATATGAGAAGACACAC
                                                                                                                                                                                                                                                                                                                                                                             AAATAACGACCATATTCATGGAGAGAAGAAGGAGTTCGTGTGCAGGTGGCTGGACTGCTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 n 1.2%; Score 61; DB 1; Length 7218; Similarity 2.6%; Pred. No. 0.00011;
Peoria
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             1815 No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative 230; Mismatches
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                                                                                                         Andrew K. Ronald D.
             5352596th University Street
                                                                       Pseudorabies Virus Deletion Mutants Involving The EPO and LLT Genes
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US-07-945-283-1
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Best Local Similarity 45.99
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 5915
                                                                                                                     6035
                                                                                                                                                                                 6095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FM PC -DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                            6155 CCCCGGCGCCACCAGCAGCAGCAGCGGTGGCCGCAGCGCCGGCACGGCGGGGGGCCCG 6096
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REGISTRATION NUMBER: 27976
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                2604 CGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCCTCCAGGGGATCTCGCCCTG 2663
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ATTORNEY/AGENT INFORMATION:
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NAME/KEY:
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TYPE: NUCLEIC ACID
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SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                             AGCCAGAGCGACGGCCTGCCCAGCCTCAGCCTCAGCCCCGCCCAGCAGTACCGCCTC 2841
                                                                                                                                                   C--GTGGCCGACTCCTACGACCCCATCTCCACCGACGCCTCGCGCCGCCTCCAGCGAAGCC 2781
                          CTTCCCCAGCCTCCCCCGCCGGCGGGCGGCGGCGGCGGCGGCGCCCCCT 6036
ACCCCAACTCCAGCTCCAGCCACCACCACCGTCGCCGTCGAGCCCGTCGCCGCGGCC
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Pred. No. 0.0025;
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TCCAGCAGCGGCGGCAGCGACCTCGGCCCCGGCCCGCCTCCGCCCCCCCGG

US-09-103-840A-2/c

GENERAL INFORMATION:
APPLICANT: FLEISCHMAN, Robert D. Sequence 2, Application US/09103840A Patent No. 6294328

APPLICANT: APPLICANT: APPLICANT:

VENTER,

John C

WHITE, Owen R. FRASER, Claire M.

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   Length 1496;
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Gaps
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3925593 CGCCGTCGCCGACTCCGCCGTGTCCGCCGGTCCCGCCGGTAGCACCGGGCCCGCCGT 3925534
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2902 AGGATGAGCCTGAAGACGCGCCTGGCGCTGCTCGGGGATGCCCTCGAGCCTGGCGTGGCC 2961
                                                                                                                                                                        2782 AGCCAGAGCGACGGCCTGCCCAGCCTCACGCCCGCCCAGCAGTACCGCCTC 2841
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                                                         AAACCACCGGGCCCGCCCCGCCCGGTGCCGACCGGCCCCACTGACACCGCCGGCG 3925358
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                                                                                                                 Matches
                                                                                                                                 Best Local
                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                         TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
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MEDIUM TYPE: Disket
                                                                         1651 TTGGTAGTGCATATGAGAAGACACACGGGCGAGAAGCCTCACAAATGCACTTTTGAAGGT 1710
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STRANDEDNESS:
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                                     TTGAAAGCACACAGAAGAACACACACAGGAGAAAAACCCTACAAATGTACATGGGAAGGG 936
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US-09-103-840A-2

OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at
OTHER INFORMATION: represent a,

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FEATURE:

ORGANISM: Mycobacterium tuberculosis

SEQ ID NO 2

TYPE: DNA LENGTH: 4403765 SOFTWARE: PatentIn

Ver. 2.1

TITLE OF INVENTION: DNA SEQUENCES FOR STRATITLE OF INVENTION: TUBERCULOSIS
TITLE OF INVENTION: TUBERCULOSIS
TILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2

Query Match Best Local S Matches 250

Local Similarity les 250; Conserv

Conservative

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Score 51.8; DB Pred. No. 0.21; 0; Mismatches

DB 4; 287;

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3925237 GCCTGGCCGGCCCCGGCTGCCCCGGCCCCGTTGCCGAACAGCAGACCGCCGGCC 2962 CTGCCTCCAGTTCATGCCCCGAGGAGGTGCAGCGACGGGGAGCCCACGGCTACGGGCGG 3021 CGGACAGGCTCCGAGGGCCCTGGCCTGCCTCGTGTGCCGCGCTTCAGCAGCCTCAGCAGC TGC 3144 CCGCCGGCCCGCCGGGAGTCGTCGCATTGGCGCCGTCACCGATCAACGGGCGCCCCAGC 3925118 CCGCCGGCCCGCCGGCCCGCCGTTGCCCCACAATCCGGCGGGCCCGCCAGGCCCGCCG 3925238

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Sequence 2, Application US/09334275
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Best Local :
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
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SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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CLONE: 727885
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Similarity 57.7%;
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US-08-125-468-1
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Best Local Similarity
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                                                                                                                                     GENERAL INFORMATION: APPLICANT: Ryan,
                           APPLICANT: Strathy, APPLICANT: Fanthi, TITLE OF INVENTION: TITLE OF INVENTION:
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INFORMATION FOR SEQ ID NO:
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NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
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SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
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CORRESPONDENCE ADDRESS:
                NUMBER OF SEQUENCES:
                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                         1711 TGCACAAAGGCCTACTCGAGACTAGAAAACTTGAAAACACACTTGAGATCTCACACTGGA 1770
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LIBRARY: SINC
TONE: 727885
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                                                                                                                                                                                                                                                                                   997 ATCAAACCTTTCCAGTGCCCGGACTGTGACCGCAGC 1032
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CITY: Palo Alto
STATE: CA
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STRANDEDNESS: sing
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                                                                          kyan, Michael J.
Lotvin, Jason A.
Strathy, Nancy
Fantini, Susan E.
NVENUTION:
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                                 useful therein
                                                Cloning of the biosynthetic pathway for chlortetracycline and tetracyline Formation and cosmids
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Pred. No. 0.018;
0; Mismatches
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2673 CCGCCGCTCCAGCGAGGCGTCACAGGCCGAGGGCCGCCAGAACGTGAGCGTGGCCGA 2732
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                              GGGCGCAGATGAAGACGCTCAGCCCGCGCGCGGGCCAGCCGCTCGGCGCTCGGCCAGTCCGA
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                                                                                                                                                                                                                                                                                                      GGATGAGCCTGAAGACGCGCCTGGCGCTCCTCGGGGATGCCCTCGAGCCTGGCGTGGCCCC
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                                                                                                                                                                                                                                                                                                                                                                                               AGGCCAAGTACGCGGCTGCCACAGGAGGGCCGCCGCCGACGCCCCTGCCCAACATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGC-----CTGCCCAGCCTGCTCAGCCTCACGCCCCAGCAGTACCGCCTCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                8454
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3023 GCCACCTGCAGCCGCACGATGCGCTGGGCCACGGCGTGAGGAGGGCCAGCCGACCCGGTGC
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APPLICANT: Strathy, Susan E.
TITLE OF INVENTION: Cloning of the biosynthetic pathway for
TITLE OF INVENTION: chlortetracycline and tetracyline Formation and
TITLE OF INVENTION: useful therein
                                                                                                                                                                                                                                                                     2793
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LENGTH: 30001 base pai
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TELECOMMUNICATION INFORMATION:
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
TOPOLOGY: lir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Tsevdos, Estelle REGISTRATION NUMBER: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: One CITY: Wayne
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                             CCGCGCCCCGTCGGGAACCCGGGGGGACAGGCCCGGGCCGGACGGCTTC
                                                                                                                                                                       TGCCGCTGGTCGCCCCGGTCACCAGGGCGACGTCGCCGGTCGTCACGGTGCTCATCGCAT 8393
                                                                                                                                   GGATGAGCCTGAAGACGCGCTGGCGCTGGGGGATGCCCTCGAGCCTGGCGTGGCCCC
                                                                                                                                                                                                                                     GGGCGCAGATGAAGACGCTCAGCCCGCGCGCCGGGCCAGCCGCTCGGCCAGTCCGA
                                                                            TGCCTCCAGTTCATGCCCCGAGGAGGTGCAGCGACGGGGAGCCCACGGCTACGGGCGGC
                                                                                                         AGGCCAAGTACGCGGCTGCCACAGGAGGGCCGCCGCCGACGCCCCTGCCCAACATGGAGA
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Lotvin, Jason
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RESULT 13 US-08-474-933-1 ; Sequence 1, Application ; Patent No. 5866410

US/08474933

GENERAL INFORMATION:

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3083 GGACAGGCTCCGAGGGCCTGGCCCTGCCTC 3112

GGAGCGTCGGCGCTGCCCAACCACCGACGC 8603

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> 8214 2733

US-08-125-468-1

MOLECULE TYPE:

TOPOLOGY: STRANDEDNESS:

linear

single

DNA (genomic)

TELEFAX: (201)831-3305 INFORMATION FOR SEQ ID NO:

<u>,,</u>

TELEPHONE:

(201)831-3241

TELECOMMUNICATION INFORMATION:

REGISTRATION NUMBER: 31,145
REFERENCE/DOCKET NUMBER: 31

31,255-02

Tsevdos, Estelle J

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/125,468

CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION:

FILING DATE:

22-SEP-1993

NAME:

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

07470

New Jersey One Cyanamid

USA

ADDRESSEE: A STREET: One CITY: Wayne

American Cyanamid Company e Cyanamid Plaza

SEQUENCE CHARACTERISTICS:

LENGTH:

: 30001 base pairs

Matches 209; Query Match

Conservative

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Mismatches

Local Similarity

1.0%;

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8514 GACTGCGGTTCGAGCGCGCCGCACACGCCGACCGCTCCAACGGGATTCGAAGCGCGGGTG 8573

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GGAGCGTCGGCGCTGCCCAACCACCGACGC 8603 GGACAGGCTCCGAGGGCCTGGCCTGCCTC 3112

US-09-071-101-1

Sequence 1, Application Patent No. 6013503

US/09071101

GENERAL INFORMATION:

APPLICANT:

Lok,

Stephen R.
HUMAN PROHORMONE CONVERTASE

CORRESPONDENCE ADDRESS: NUMBER OF SEQUENCES: APPLICANT: Jaspers, TITLE OF INVENTION:

ADDRESSEE:

E: ZymoGenetics, Inc. 1201 Eastlake Avenue

East

DЪ

1088

CCACCACCTACAGCAGCGGGCGTGGCCACCCGACACCCAGATCGTCACCACGGACCTGCATC

1147

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2762 CGCGCCGCTCCAGCGAAGCCAGAGCGACGGCCTGCCCAGCCTGCTCAGCCTCACGC 2821
                                                               AGGGCCGGCCGCAGAACGTGAGCGTGGCCGACTCCTACGACCCCATCTCCACCGACGCCT 2761
                                                                                                                                 GCTCCTCAGGGATCTCGCCCTGCTTCTCCAGCCGCCGCTCCAGCGAGGCGTCACAGGCCG 2701
                                                                                                                                                                TGACCAAGGGCCGCGGCGGCTGGGCACGCTCTTCATCTGGGCCTCGGGCAACGGCGGCC 967
                                GCAGCACCACCCAGGAGGGCCGCGTGCCCTGGTACAGCGAAGCCTGCGCCCTCCACCCTCA 1087
                                                                                                TGCACTACGACAACTGCGACGGCTACACCAACAGCATCCACACGCTTTCCGTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: LOK, Si
APPLICANT: Josephen R.
APPLICANT: Jaspers, Stephen R.
TITLE OF INVENTION: HUMAN PROHORMONE CONVERTASE
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Applia Patent No. 610004
                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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EARLIER APPLICATION NUMBER: US 60/044,015
EARLIER FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 1999-08-06 EARLIER APPLICATION NUMBER: US 09/071,101
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
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TCGCCCTAGCGCTGGAGGCCAACCCGTTCCTGACGTGGAGAGACATGCAGCACCTGGTGG
                               CGCCCCTGCCCAACATGGAGAGGATGAGCCTGAAGACGCGCCTGGCGCGCTGCTCGGGGATG 2941
                                                                                                CCGCCCAGCAGTACCGCCTCAAGGCCAAGTACGCGGCTGCCACAGGAGGGCCGCCGCCGA 288:
                                                                                                                                                                CGCGCCGCTCCAGCGAAGCCAGCCAGAGCGACGGCCTGCCCAGCCTGCTCAGCCTCACGC 2821
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US-09-071-101-1

OTHER INFORMATION: LOCATION: NAME/KEY:

Coding Sequence 61...2325

FEATURE: MOLECULE TYPE:

TOPOLOGY:

linear

CDNA

INFORMATION FOR SEQ ID NO:

TELEFAX:

206-442-6678

SEQUENCE CHARACTERISTICS:

LENGTH: 2744 base pairs
TYPE: nucleic acid
STROEDNESS: double

NAME: Parker, Gary E.
REGISTAN NUMBER: 31,648
REFERENCE/DOCKET NUMBER: 97
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-442-6673

31,648

97-05

ATTORNEY/AGENT INFORMATION:

FILING DATE:

APPLICATION NUMBER:

SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:

2.0

CLASSIFICATION: PRIOR APPLICATION DATA:

FILING DATE

APPLICATION NUMBER:

US/09/071,101

COMPUTER READABLE FORM: MEDIUM TYPE: Diskett

98102

USA

COMPUTER:

: Diskette IBM Compatible

OPERATING SYSTEM:

STATE: W STREET: CITY: S

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Seattle

Query Match Best Local Similarity Matches 206; Conserv

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Score 49.4; DB Pred. No. 0.04; 0; Mismatches 2

DB 3; 261;

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Search completed: December 11, 2002, 01:25:10 Job time : 3354 secs

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OM nucleic - nucleic search, using sw model
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Copyright (c) 1993 - 2002 Compugen Ltd.
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Copied from PCTUS2003092 on 04-03-2004

ALIGNMENTS

RESULT 1
HUMGLI3A
LOCUS
DEFINITION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS ACCESSION VERSION TITLE

Human DNA-binding protein (GLI3) mRNA, complete cds. M57609 M34366 M57609.1 GI:183247 Human glioblastoma multiforme xenograft D245MG, cDNA to mRNA. GLI3 gene linear PRI 08-NOV-1994

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 5055)

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Ruppert, J.M., Vogelstein, B., Arheden, K. and Kinzler, K.W.

Ruppert, J.M., Vogelstein, B., Arheden, W. and Minzler, K.W.

Ruppert, J.M., Vogelstein, B., Arheden, W. and Minzler, K.W.

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/protein_id="AAA52564.1"

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGGGAGAAACTGTCTTCCATTTCAGTTTTGAATCAGTATTGTTACACTCAAACCACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGATGTGTTTCAATTATATTCCTTTTATGGAAAAGGACTCTGAAAAAACCCTAAAGTATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTGTTTTGGCTGTTTTTTTTAGTTCTGTATGTATTTTAGCAATCTCATCTCACCTAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTAGGAAAAAAAGACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTAGGAAAAAAAGACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTTCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGTTCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCACCAACATGGCTATCGGGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCAACATGGCTATCGGGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTGTTTTGGCTGTTTTTTAGTTCTGTATGTATTTTAGCAATCTCATCTCACCTAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATGTGTTTCAATTATTCCTTTTATGGAAAAGGACTCTGAAAAACCCTAAAGTATTC
                                                                                                                                                                                                                                                                                          Mammalia: Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 4743)

Kalff-Suske,M., Wild,A., Topp,J., Wessling,M., Jacobsen,E.
Bornholdt,D., Engel,H., Heuer,H., Aalfs,C.M., Ausems,M.G.,
Barone,R., Herzog,A., Heutink,P., Homfray,T.,
Gillessen-Kaesbach,G., Konig,R., Kunze,J., Meinecke,P., M.
Rizzo,R., Strenge,S., Superti-Furga,A. and Grzeschik,K.H.
Point mutations throughout the GLI3 gene cause Greig
cephalopolysyndactyly syndrome
Hum. Mol. Genet. 8 (9), 1769-1777 (1999)
                                                                                                                                                                                   Direct Submission
Submitted (20-OCT-1999) Kalff-Suske M.,
Philipps-Universitaet Marburg, Bahnhofs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                         Related
                                                                                                                                                                          GERMANY
                                                                                                                                                                                                                                      Kalff-Suske,M.
                                                                                                                                                                                                                                                                                       99371786
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                       10441342
                                                                                                                                                                                                                                                     (bases 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene; Gli3 protein;
                                                                                                                                                        sequences M57609
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:6102811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLI3 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata;
Primates;
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for GLI3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata;
                                                                                                                                                                                        Bahnhofstrasse
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factor"
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                                                                                                                                                                                          Marburg,
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TRESSPRLSARPSRKRTLSISPLSDHSFDLQTMIRTSPNSLVTILNNSRSSSSASGSY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NPPAMATSAEKRSLVLQNYTRPEGGQSRNFHSSPCPPSITENVTLESSLTMDADANLND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LRSGPAGGYQTLGENSNPYGGPEHLMLHNSPGSGTSGNAFHEQPCKAPOYGNCLNNOP
PAGALLGGAGGGQLGAKKSTPMQGSGGQLNFGELPVAPNESAGSMVGMQNOPVGO
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DSHDLGGVQLDPDAILDDGDHSSLANSGALSPSIIQNLSHSSSRLTTPRASLPFPALSM
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1540 c 1233 g E29 t
                                                                                                                                                                                                 PYRGTVFAMDPRNGYMEPHYHPPHLFPAFHPPVPIDARHHEGRYHYDPSPIPPLHMTS
                                                                                                                                                                                                                                               ALSSSPTYPDLPFIRISPHRNPAAASESPFSPPHPYINPYMDYIRSLHSSPSLSMISA
                                                                                                                                                                                                                                                                                TRGLSPTDAPHAGVSPAEYYHQMALLTGQRSPYADIIPSAATAGTGAIHMEYLHAMDS
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Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93.6%; Score 4732;
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480 294 240 354 414 474 534 594 ATGGAGGCCCAGTCCCACAGCTCCACGACCACTGAAAAGAAAAAAGTTGAGAATTCCATA 114 GIGAAGIGCTCCACTCGAACAGAIGIGAGCGAGAAAGCCGIIGCCTCCAGCACCACTICT 174 AATGAGGATGAAAGTCCTGGACAGACTTATCACAGAGAGAAGAAAGGCAATCACTATG CAGCCACAGAATGTCCAGGGGTCAGCAAAGTCAGTGAGGAACCTTCAACATCGAGTGAC CAGCCACAGAATGTCCAGGGGCTCAGCAAAGTCAGTGAGGAACCTTCAACATCGAGTGAC GAGAGGCCTCATTGATCAAGAAAGAATCCATGGGTCCCTGCCACACGTGGCGGAGCCC GCCTTATCTAGTAGCCCTACGTATCCGGACCTGCCCTTCATTAGGATCTCCCCACACCGG TCTGTGCCGTACCGCGGGACGGTGTTTGCCATGGACCCCAGGAATGGTTACATGGAGCCC CACTACCACCTCCTCTTTTCCCTGCCTTCCATCCTCTGTACCAATTGATGCCAGA CATCATGAGGGCCGTTACCATTACGATCCTCCGATTCCTCCATTGCATATGACTTCC Best Local Similarity 100.0%; Matches 4743; Conservative C Query Match BASE COUNT ORIGIN 55 115 175 121 235 181 415 475 535 61 241 355 301 361 421 g δ g ò

1434

1320

TCTGCAGTGAGCAGCACTGGTGACCCGATGCACAACAAGAGAGGTCCAAGATCAAACCCGAT

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1254 1200

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1081

1141 1255 1201 1315 1261

1195

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1494

1435 1381

1321

1375

AACTGCCACTGGGAAGGCTGCGCGAGGGAGTTCGACAACCCAAGAGCAGCTTGTGCACAT

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1674

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1555 1501 1615

1441

1495

1380

1134 1020 1014 1074 1194 540 900 99 774 720 780 900 834 894 GCCTTATCTAGTAGCCCTACGTATCCGGACCTGCCCTTCATTAGGATCTCCCCACACGG CTCAATAATTCCCGTAGCAGCTCTTCAGCAAGTGGCTCCTATGGTCACTTATCTGCAAGT CAGCAGATCCTAAGCCGACAACAGAGCTTAGGTTCAGCCTTTGGACACAGCCCTCCACTC AACCCCCCTGCTTCCGAGTCTCCCTTCAGCCCTCCACATCCCTACATTAATCCCTAC ATGGACTATATCCGCTCCTTGCACAGCACCCGTCGCTCTCCATGATCTCAGCAACCCGT GGGCTGAGCCCTACAGATGCGCCCCATGCAGGAGTCAGCCCAGCAGAATACTATCATCAG ATGGCCCTGCTAACTGGCCAGCGCAGCCCTATGCAGACATTATTCCCTCAGCTGCCACC GCCGGCACGGGGCCCATCCACATGGAATATCTTCATGCTATGGATAGCACCAGATTCTCC GCCGGCACGGGGGCCATCCACATGGAATATCTTCATGCTATGGATAGCACCAGATTCTCC AGCCCCAGGCTGTCAGCCAGGCCGAGCCGAAAACGTACACTGTCCATATCACCACTCTCC GATCATAGCTTTGACCTTCAGACCATGATAAGGACGTCTCCCAACTCCTTGGTCACGATT 1015 1075 1135 481 595 655 601 715 661 775 721 835 895 1021 781 955 961 οy Вp ò QQ δ g δ pp οy Dp δ q οy d Ω g Q g à qq ဖ

2820 2940 3000 3060 3180 3294 3360 3474 3420 3534 3480 3540 3654 3600 3714 3660 3774 3720 3780 2814 2934 3054 3114 3174 3234 3354 3414 2994 3120 GACCCTGATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGACGTGCTGCTGTTTTA 3300 CAGCCAGTGGCCCCTGGTGCACTCGACGGTGCCTGTGGTGCCGGGATTCAAGCCTCAAAG 3894 AACCCCTACGGTGGCCCAGAGCACTTGATGCTCCACAACAGCCCCGGAAGTGGCACCAGT CTCACGCCCGCCCAGCAGTACCGCCTCAAGGCCAAGTACGGGGTGCCACAGGAGGGCCG GTGCCGCGCTTCAGCAGCTCAGCAGCTGCAACCCCCGGGCGATGGCCACGTCCGCGGAG AAGCGCAGTCTCGTGCTTCAGAATTACACGCGGCCCGAGGGCGGCCAGTCCCGAAACTTC CACTCGTCCCCCTGTCCTCCCAGCATCACCGAGAACGTCACCCTGGAGTCCCTGACCATG GACGCTGATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGAGGTGGTGCAGTATTA CGGGGGCCGCTGTGCCGCAGACTCGCGCTTTGGGTTCTGCAACGGCATGGTCGTCCAC GGGGATGCCCTCGAGCCTGGCGTGGCCCTGCCTCCAGTTCATGCCCCGAGGAGGTGCAGG GACGGGGGGCCCACGGCTACGGGCGCCCCACCTGCAGCCGCACGATGCGCTGGGCCAC GGCGTGAGGAGGCCCAGCGACCCGGTGCGGACAGGCTCCGAGGGCCTGGCCCTGCCTCGT AATTCCCAGAACCAGGGTACGAGCAGCACTTCCCCAGCGCCCTCCCGGACGACAGC AAAGTGCCCCACGGGCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCACGCTGGC CAGCAGTICCATGCCCTCGAGCAGCCCTGCCCCGAGGGCAGCAAAACCGACCTGCCCATT CAGTGGAACGAAGTCAGCTCCGGAAGCGCCGACCTGTCCTCCTCCAAGCTCAAGTGTGGG CCGCGGCCCCGCTGTGCCGCAGACTCGCGCCTTTGGGTTCTGCAACGGCATGGTCGTCCAC CCGCAGAACCCCTTGAGGAGCGGGCCTGCTGGGGGCTATCAGACCCTCGGGGAGAACAGC GGAAACGCCTTCCATGAACAGCCCTGTAAGGCCCCGCAGTATGGGAACTGTCTCAACAGG 2761 2881 2941 3055 3001 3175 3241 3301 3415 3475 3421 3481 3595 3541 3655 3601 3715 3661 3775 3721 3835 2935 2995 3115 3061 3121 3235 3181 3295 3355 3361 3535 2815 g g Q Db g Qγ QΥ g P Pp δ g QΥ QQ ΩY Op Qγ qq δ g òγ g δy Db QΥ d QY a οy QΥ a QΥ δŽ Ω Q ò Q

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IPGIPTVLNPVQVSGGPSESSQSKPTSESAVSSTGGPMHNKRSKIKPDEDLFSPGSRG
                                                                                                                                                                                                                                                                            Direct Submission
Submitted (15-JAN-1996) H. Thien, Medizinische Hochschule Hannover,
Institut fuer Molekularbiologie, OE 5250, Konstanty-Gutschow-Str.
8, D- 30 625 Hannover, FRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPGQIYHRERRNAITMOPOSVQGLNKISEEPSTSSDERASLIKKEIHGSLPHLAEPSL
PYRGTVFAMDPRNGYMEPHYHPPHLFPAFHPPVPIDARHHEGRYHYDPSPIPPLHVPS
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                                                                                                  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69 CCACAGCTCCACGACCACTGAAAAGAAAAAAGTTGAGAATTCCATAGTGAAGTGCTCCAC 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126 CGCAGGGATTCCTTTGAGAACAAGCTGAAGTAATGAGAAGACATTATGGAGGCCCAGGC 185
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 10; Length 5113;
                                                                                                          1 (bases 1 to 5113)
Thien, H., Buscher, D. and Ruther, U.
Cloning and sequence analysis of the murine Gli3 cDNA
Blochim. Biophys. Acta 1307 (3), 267-269 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              769; Indels
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Pred. No. 0;
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                                                                                                                                                                                                                                                                                                                                   625 Hannover, FRG
Location/Qualifiers
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84.28;
  GI:1419013
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Thien, H.
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                         CACTGGTGACCCGATGCACAACAAGAGGTCCAAGATCAAAACCCGATGAAGACCTCCCCAG
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4442 4565 4022 4262 4505 4443 AGACGCCAGCTGCCTGCTACAGGGGACCAGCGCCCAAAAACTCTGAGTTACTTTCCCCAGG 4502 GACTICCAGIGCTCTAGAICATGCCTGTGGTACAGGGAITCAAGGGTCCAAGGTAAAAGG 4025 GGCTCACCAGCTCCTCGGCGACAGCATGCAGCACCCGGGGGGGCAGGCCGCCCCGGTCAGCA 4082 GGCCCCTGGTGCACTCGACGGTGCCTGTGGTGCCGGGATTCAAGCCTCAAAGCTGAAGAG CACCCCCATGCAAGGGAGCGGGGCCAGCTGAATTTCGGCCTGCCGGTAGCGCCAAATGA GTCAGCTGGCAGCATGGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCT GATGCTTGGGCAGATTAGTGCTACCTCACACATCAACATCTACCAAAGGGCCAGAGAGCTG CCTGCCAGGGCTCACGGCATGGGCAGCCAGCCGTCAAGCTTGGCAGTTGTCAGGGGCTA CCAGCCATGTGCCAGCTTTGGGGGCAGCAGGCGCCAGGCTATGCCGAGGGACAGCCTTGC TCTGCAGTCAGGACAGCTCAGTGACACAGAGTCAGACCTGCAGGGTGAATGGTATCAAGAT GGAGATGAAAGGGCAGCCCCATCCGCTGTGCTCTAATCTGCAGAATTACTCTGGTCAGTT CTATGACCAAACCGTGGGCTTCAGTCAGCAAGACACGAAAGCTGGTTCATTCTCTATTTC GA-----GGAGCGGCCTGCTGGGGGCTATCAGACCCTCGGGGAGAACAGCAACCCCTA AGCAGGGTACGAGCACTTCCCCAGCGCCCTCCCGGACGACACAAAGTGCCCCACGG CCTCGAGCAGCCCTGCCCCGAGGGCAGCAAAACCGACCTGCCCATTCAGTGGAACGAAGT CAGCICCGGAAGCGCCGGACCIGICCICCICCAAGCICAAGIGIGGGCCGCGCCCCGCTGI GCCGCAGACTCGCGCCTTTGGGTTCTGCAACGGCATGGTCGTCCACCCGCAGAACCCCTT CGGTGGCCCAGAGCACTTGATGCTCCACACAGCCCCGGAAGTGGCACCAGTGGAAACGC CTTCCATGAACAGCCCTGTAAGGCCCCGCAGTATGGGAACTGTCTCAACAGGCAGCCAGT GCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCACGCTGGCCAGCAGTTCCATGC 3843 4026 4023 4143 4266 4326 4386 4323 4383 3846 3903 4086 4146 4083 4206 4203 4263 3606 3666 3669 3786 3723 3783 3966 3963 3369 3486 3429 3546 3489 3549 3609 3726 QΫ qq Qγ qq QΫ QQ δ QQ ÓΥ g ŏ Q òγ g ٥y QQ δý Dp Qγ g δ g Ω g δ qq ф qq $Q\underline{\gamma}$ Dp QΥ dd δy P Qγ ŏ

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AF231112 4962 bp mRNA linear VRT 18-JUN-2000 Coturnix coturnix Kruppel family member GLI3 (Gli3) mRNA, complete
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Direct Submission
Submitted (03-FEB-2000) Cell and Developmental Biology, University
of Pennsylvania, 421 Curie Blvd, Philadelphia, PA 19104-6058, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Coturnix.
4743 GITCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGCTT 4802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5029 ATGTGTCTCAAGTATATTCCTTTTATGGAAAAGGACTCTGAAAAACCCTAAGGTATTCTA 5088
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Borycki,A., Brown,A.M. and Emerson,C.P. Jr.
Shh and Wnt signaling pathways converge to control Gli gene activation in avian somites
Development 127 (10), 2075-2087 (2000)
                                                                                                                                                                                                              GATTGACTTCGATGCCATCATAGACGATGGGGACCACTCCAGCCTGATGTCGGGGGGCCCT
                                                                                                                                                                                                                                             4686 GATTGATTTTGATGCCATCATAGATGATGGGGACCATACCAGCCTAATGTCAGGGGCCTT
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Adam="Coturnix coturnix"
/db_xref="taxon:9091"
/dev_stage="stage HH12 embryo"
1. 4962
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AF231112.1 GI:8571369
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SPGQTYHRERRNAJTMQPQGGQGLSK1SEEPSTSSEERASLIKKEIHGSISHLPEESV
PYRGTLFTMDPRNGYMDPHYRDPPHLFPAFHPPVPIDARHHEGRYHYEPSPIPPLHVP
                                                                                                                                                                                                                                                                                                                                                                     QLIGDGIHYQGVNQSGPMMLGQVSPTSQSSLYQGPQSCPPVFHTIGNQSSGLŠVAKSY
QCANYSGMRRQNVLRNNLTQQQGHVSDYNQTRRVNTIKMBMQGGSQGPCSNMQYNSG
QLYDQPWGFSHQAMRTGSSFPVSEANCLLQFTATANSELLSFGANQYSSTVDSLDNN
SLEGVQIDFDAIIDDGDHVSLISGALSPSIIQNLSRNSSRLTTPRASLTFPAVPVSTT
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                                                                 /translation="MEAQSHSSTTTEKKKVENSIVKCSSRTDVSEKAVASSTTSNEDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACGACCACTGAAAAGAAAAAGTTGAGAATTCCATAGTGAAGTGCTCCACTCGAACAG 136
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/note="zinc finger transcription factor"
                    /product="Kruppel family member GLI3"
/protein_id="AAF76851.1"
/db_xref="GI:8571370"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54.6%; Score 2758.6; DB 5; 75.1%; Pred. No. 0; tive 0; Mismatches 1154;
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               /codon_start=1
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CCTA 553 CCAA 701	rccg 613	rcag 761	FCCT 673		SAIG /33 SACG 881		94	ATCC 853	crrc 1001		10	CTTC 973 	1711 7117	AGCA 1033 	TOOL TOOL	124	1 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7					GTCA 12/0 GTCA 1421	ACCA 1327			CCCA 1387 CCCA 1541							CAGA 1627
ATCTAGTAGCC	CGCTGCTGCT	TGCTGCAGCA	CTATATCCGC		CAGCCCAACAC			CACGGGGGC	SAGCTGGTGCT	CAGGCTGTCA	AAGATTATCA	ATAGCTTTGAC	ACAGCI I 16AC	ATAATTCCCGT		CAGCCCIGCC		GCAGATCOIA				ACCCCGTCCAG	び曲がないで曲が出せる			ATGAGGACCTC			C K C C C E C K K K K	AAACIGCCAC GAACIGCCAT	ATATAAATAAC.		SCTCAAGAGAG
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CCGATTCCTCC	CCCTTCATTAC	CCTTTCATTA	CCTCCACATC		TCCCTGTCCA	GTCAGCCAG	GICAGICCAG	GCAGACATTA	GCAGACATCA	CATGCTATGG	CATGCCATGG	CGTACACTGT	Ceracerret	ACGTCTCCCA					ECC & CEEC			AGGCCTATTC	- 4000000000			ATGCACAACA 				AACAAACAGG	GAGTTCGACA	GAGTTTGACA	AAGAAGGAGT
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2107 2287 2347 2407 2467 2707 2167 2321 CCAGGAGAAACCCGGCAGGGACCAAATGGATGGAGCACGTAAAACTAGAAAGCTAAAAC CTATICIGCCAAACAGGAACGAACTITCAAGTACAGACAICACTGTGTIGAACGTGCTAA CAGGGATCTCGCCCTGCTTCTCCAGCCGCCGCTCCAGCGAGGCGTCACAGGCCGAGGGCC CTCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTCGAGACTAGAAACTTGAAAA CACACTTGAGATCTCACACTGGAGAAAACCATACGTCTGTGAGCACGAAGGTTGCAACA AGGCTTTCTCAAATGCCTCTGATCGCGCCAAACACCAAAACAGAACGCATTCCAATGAGA GGAAACATGTGAAGACAGTGCATGGCCCAGAGGCTCATGTCACCAAGAAGCAGGGGG ACATCCATCCTCGGCCGCCACCCCCGAGAGATTCCGGCAGCCATTCACAGTCCAGGTCGC CTGGCCGACCGACTCAGGGAGCCCTTGGTGAGCAGCAGGACCTCAGCAACACTACCTCAA **AGCGGGAAGAATGCCTCCAGGTGAAAACCGTCAAGGCAGAGAAGCCAATGACATCTCAGC** CAAGCCCTGGTGGTCAGTCTTCATGCAGCAGCCAACAGTCCCCCATCAGCAACTATTCCA ACAGTGGGCTCGAGCTTCCTCTGACCGATGGAGGTAGTATAGGAGACCTCAGTGCCATCG ATGAAACCCCAATCATGGACTCAACCATTTCCACTGCAACCACAGCCCTTGCTTTGCAAG ATGAAACCCCAATCATGGACTCTACCATTTCCACAGCCACACAGACACTTGGCTTACAGG CCAGGAGGAATATGACAGGGACCAAATGGATGGAGCAAGTGAAATTAGAAAGGTTGAAAC AAGTGAATGGAATGTTTCCGCGACTGAACCCCATTCTACCCCCTAAAAGCCCCTGCGGTCT CGCTTCTCCCGGGCAGAAGCGACCTCTCTGGGGTGGACGTCACTATGCTGAACATGCTCA ACAGAAGGGACAGCACCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTCCT 8 œ œ œ 8

4154 4084 4384 4498 4558 4618 4678 4798 4264 4454 4694 4814 CCCCCATGCAAGGGAGCGGGGGCCAGCTGAATTTCGGCCTGCCGGTAGCGCCAAATGAGT 3964 CACCAGTATTTCATACCATTGGTAACCAGTCTTCAGGTTTGTCAGTGGCCAAGAGTTACC 4334 4754 4933 TCCATGAACAGCCCTGTAAGGCCCCGCAGTATGGGAACTGTCTCAACAGGCAGCCAGTGG CCCTGAGCCCAAGTATCATTCAGAACCTTTCCCATAGCTCCTCCCGCCTCACCACGCCTC CCCCTGGTGCACTCGACGGTGCCTGTGCTGCCGGGATTCAAGCCTCAAAGCTGAAGAGCA 4395 AACAGCAAGGACATGTAAGTGATTACAACCAGACGTGCAGGGTAAACACCCATTAAGATGG CAGCTGGCAGCATGGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCTGG TGCCAGGGGTCACGGCATGGGCAGCCAGCCGTCAAGCTTGGCAGTTGTCAGGGGGTACC AGCCATGTGCCAGCTTTGGGGGCAGCAGCGCCAGGCTATGCCGAGGGACAGCCTTGCTC 4499 CAGGTGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGACAGCCATGACCTGGAAGGGG TACAGATTGACTTCGATGCCATCATAGACGATGGGGACCACTCCAGCCTGATGTCGGGGG TGCTTGGGCAGATTAGTGCTACCTCACACATCAACATCTACCAAGGGCCAGAGAGCTGCC 4265 TGCAGTCAGGACAGCTCAGTGACACAAGTCAGACCTGCAGGGTGAATGGTATCAAGATGG ATGACCAAACCGTGGGCTTCAGTCAGCAAGACACGAAAGCTGG----TTCATTCTGTATTT 4442 CAGACGCCAGCTGCTACAGGGGA----CCAGCGCCAAAAACTCTGAGTTACTTTCCC GGGCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCAACATGGCTATCGGGGAC GCTTTAGGAAAAAAAGACTGCAACCAA 4825 3785 3921 3845 3975 3905 4035 3962 4025 4085 4215 4145 4275 4205 4335 4325 4455 4385 4515 4635 4559 4619 4755 4815 4799 4695 4679 4739 4874 Ω g Pp g ρp Db QΥ Qγ δ Q δ φ Qγ Op Óγ δ q οy qq qq Óγ g QΥ Ŏλ g QΥ g ōλ QQ δy 셤 QΥ Dp δý

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1542 GCAGCACTGGGGATCCAATGCACAAGCGCTCCAAGATAAAGCCCGATGAGGACCTCC 1601
462 AAGAGAICCAIGGAICIAIAICGCACCIICCIGAACCIICIGIACCIIAICGIGGGACAI 521
                        377 IGTITGCCATGGACCCCAGGAATGGTTACATGGAGCCCCACTACC
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Philadelphia, PA 19104-6058, USA
                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Coturnix.
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                             AF231111 5025 bp mRNA linear VRT 18-JUN COturnix coturnix potential GLI3 (Gli3) gene N- and C-terminal fragments, complete sequences.
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Development 127 (10), 2075-2087 (2000)
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/dev_stage="stage HH12 embryo"
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Borycki, A., Brown, A.M. and Emerson, C.P.
Direct Submission
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1384 1481 942 ACGCTCCACATGCTGGCGTCAGTCCAGCTGAATATTATCATCAGATGGCTCTGTTGGCAG 1001 1181 TICAGACCATGATAAGGACGICICCCAACTCCTTGGICACGAITCICAATAATICCCGIA 1030 GCAGCTCTTCAGCAAGTGGCTCCTATGGTCACTTATCTGCAAGTGCAATCAGCCCTGCCT 1090 TGAGCTTCACCTACTCTTCCGCGCCCGTCTCTCT---CACATGCATCAGCAGATCCTAA 1147 TGAGTTTCACATACCCTCCTACACCGGTATCCCTCCAGCAAATGCATCAGCAATTATAA 1361 GCCGACAACAGAGCTTAGGTTCAGCCTTTGGACACAGCCCTCCACTCATCCACCTGCCC 1207 TCAGCTCCGGCCCTTCTGAGTCCTCA---CAGAACAAGCCCCACGAGTGAGTCTGCAGTGA 1324 TCAGCTCTGGACCTTCTGAGTCCACACAGCAGAACAAACCCACAAGTGAGTCTGCAGTGA 1541 970 910 490 550 761 610 821 881 730 731 ATGCGCCCCATGCAGGAGTCAGCCCAGCAGAATACTATCATCAGATGGCCCTGCTAACTG 790 421 701 1422 CAACTITICCTACCCAGAGACCCATCCTGGCATCCCCAGTGTCCTGAACCCTGTCCAGG 791 GCCAGCGCAGCCCCTATGCAGACATTATTCCCTCAGCTGCCACCGCCGCCACGGGGGGCCA TCCACATGGAATATCTTCATGCTATGGATAGCACCAGATTCTCCAGCCCCAGGCTGTCAG CAACTITICCAACACAGAGGCCTATICCAGGGATCCCTACGGTTCTGAACCCCGTCCAGG GCAGCACTGGTGACCCGATGCACAACAAGAGGTCCAAGATCAAACCCGGATGAAGACCTCC CTACGTATCCGGACCTGCCCTTCATTAGGATCTCCCCACACGCGGAACCCCGCTGCTT CCTTGCACAGCAGCCCATCGCTCTCCATGATCTCAGCAACCCGTGGGCTGAGCCCTACAG CCAGGCCGAGCCGAAAACGTACACTGTCCATATCACCACTCTCCGGATCATAGCTTTGACC ATCTTTTCCCTGCCTTCCATCCTCCTGTACCAATTGATGCCAGACATCATGAGGGCCGGTT CAACATATTCAGATCTTCCTTTCATTAGAATTTCCCCACACAGAAATTCTGCTGCAGCAT ----ACCCTCCTC ACCATTACGATCCATCTCCGATTCCTCCATTGCATATGACTTCCGCCTTATCTAGTAGCC CCGAGTCTCCCTTCAGCCCTCCACATCCCTACATTAATCCCTACATGGACTATATCCGCT

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qq	1602	CCAGCCCGGGTGCAGGAAGCGTGCAGGAACAGCCAGAAGGTATGACCCTTGTAAAGGAGG	16
δo d	1445	AAGGGACAAAGATGAAAGCAAACAGGAGCCTGAAGTCATCTATGAGACAAACTGCCACT	1504
2		AAGGGACAAAGATGAAAAAAAAAAGGGGGAGTGGTCTACGAGGGAGG	_
δ		GGGAAGGCTGCGCGAGGAGTTCGACACCCAAGAGCAGCTTGTGCCACATATAAATAA	15
QQ		GGGAAGGCTGTTCCCGGGAGTTTGACACACAGGAACAGCTAGTGCATCATATAAATATG	17
y d		ACCATATICATGGAGAGAAGAAGGAGTICGTGTGCAGGTGGCTGGACTGCTCAAGAGGCTGT	1624
3 .		ACCACATACATOG TONGANGANGANG TIGIGIGC CONTRACTION TOTACCONTRACTOR TOTACCONTRACT	1841
op Op	1625	AGAACCCTTCAAAGCCCAGTATATGTTGGTACTGCATATGAAAGAAGAACACGGGCGAGA 	1684 1901
ογ		AGCCTCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTGGAGACTAGAAAACTTGA	1744
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Q Pp		AAACGCACTTGAGATCTCACACTGGAGAAAACCATACGTCTGTGAGCACGAAGGTTGCA	7 7
C		ACAAGGCTTTCTCAAATGCCTCTGATCGCGCCAAACACCAAAACAGAACGCATTCCAATG	18
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edt t	1865	AGAAACCATATGTGTGCAAAAATCCCAGGCTGCACTAAGCGTTACACAGAGCCCAAGCTCCC	
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nd HX	1925	TCCGGAAACATGTGAAGACAGTGCATGGCCCAGAGGCTCATGTCACCAAGAAGCAGGGGGGGG	~ ~
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08		CAAAGCGGGAAGAATGCCTCCAGGTGAAAACCGTCAAGGCAGAGAAGCCAATGACATCTC	_ N
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-303	2225	CCAACAGTGGGCTCGAGCTTCCTCTGACCGATGGAGGTAGTATAGGAGACCTCAGTGCCA	a
各.	2442	CCAACAATGGGATCGAGCTTACTCTGACTGGTGGCAGTAGTAGGAGAGCTCAGTGTCA	~
28)(TCGATGAAACCCCAATCATGGACTCAACCATTTCCACTGCAACCACAGCCCTTGCTTTGC	OI.
<u>}</u> 4		TCGATGAAACCCCAATCATGGACTCTACCATTTCCACAGCCACACAGGACTTGGCTTAC	(7)
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2704 2944 3161 3181 3458 3635 3749 3481 ACGAAGTCAGCTCCGGAAGCGCCGACCTGTCCTCCTAGGTCAAGTGTGGGGCCGCGGC 3601 GGGAGTCTGGAGTATCTCCACTGCCTCCAGTGAATGCCCCTCGAAGAAGTAGTAGTGATGGTG CCCTGCCCAACATGGAGAGGATGAGCCTGAAGACGCGCCTGGCGCTCGGGGATGCCC TCGAGCCTGGCGT - - - GGCCCTGCCTCCAGTTCATGCCCCGAGGAGGTGCAGCGACGGGG TCAACAGAAGGGACAGCGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCT GCCGGCCGCAGAACGTGAGCGTGGCCGACTCCTACGACCCCATCTCCACCGACGCCTCGC GCCGCTCCAGCGAAGCCAGCCAGAGCGACGGCCTGCCCAGCCTGCTCAGCCTCACGCCCG GAGCCCACGGCTACGGGCGCCCCCCCCCCCCCCCCCCCACGATGCGCCTGGGCCACGGCGTGA GCTTCAGCAGCCTCAGCAGCTGCAACCCCCCGGCGATGGCCACGTCCGCGGAAGCGCA ACCGTGTTCTTCAGAACTGTACCCGTTCTGAGGGTGGCCTTTTCCGTGCTT---CAGTT CCCCCTGTCCTCCCAGCATCACCGAGAACGTCACCCTGGAGTCCCTGACCATGGACGCTG ATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGACGTGGTGCAGTATTTAAATTCCC TGACGCTTCTCCCGGGCAGAAGCGACCTCTCTGGGGTGGACGTCACTATGCTGAACATGC CCCAGCAGTACCGCCTCAAGGCCAAGTACGCGGCTGCCACAGGAGGGCCGCCGCCGACGC GGAGGGCCAGCGACCCGGTGCGGACAGGCTCCGAGGGCCTGGCCCTGCCTCGTGTGCCGC GTCTCGTGCTTCAGAATTACACGCGCCCGAGGGCGGCCAGTCCCGAAACTTCCACTCGT AGAACCAAGCAGGGTACGAGCAGCACTTCCCCAGCGCCCTCCCGGACGACAGCAAAGTGC CCCACGGGCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCACGCTGGCCAGCAGT AACA-----CAGTGTGGTTTTAGGAAACAACCAATCCTAGCAGCTTTGACCGAGCCCCTC TCCATGCCCTCGAGCAGCCCTGCCCCGAGGGCAGCAAAACCGACCTGCCCATTCAGTGGA CAGCAAGCAGTCAGCCTGCAGGCTCAGAGGCAAGCAAGAGCGACTTACCCCATTCAGTGGA 2465 2682 2742 2585 2802 2862 2885 2945 3222 3282 3342 3182 3402 3242 3459 3302 3579 3422 3482 3542 2525 2705 2922 2765 2982 2825 3042 3102 3162 3002 3062 3122 3519 3362 3636 3690 QQ Op qq qq qq Q g Ωÿ οy QΥ QΫ P Db QΥ Op Q qq Qγ Qγ Qγ QΥ δ δ δŽ q Ω Q Ω g QΥ q QΥ g q QΫ́ Q

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3750 AIGAAGTAAGCTCAGGAAGTTCTGAATTATCTCCTACAAAACTGAAATGTAGTCAGCGCT 3809
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                                                                                                                    3870 ACTTGCAGAGAAGC----AATGTCCCCCAGCAAAATGGGTATCAGAGCCTGATGGAAA 3923
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                                       CCGCTGTGCCGCAGACTCGCGCCTTTGGGTTCTGCAACGGCATGGTCGTCCACCCGCAGA
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Wang, B., Fallon, J.F. and Beachy, P.A.
Hedgehog-regulated processing of G113 produces an anterior/posterior repressor gradient in the developing vertebrate
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Archosauria, Aves, Neognathae, Galliformes, Phasianidae,
Phasianinae, Gallus.
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4815 GAGCCCTGAGCCCAAGCATCATTCAGAATCTCTCCCGCAATTCCTCACGCCTCACAACTC 4874
                                                                                      CTCGGGCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCACCAACATGGCTATCGGG 4735
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Wang, B. and Beachy, P.A.
Direct Submission
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HOMO sapiens BAC clone GS1-539F22 from 7p12-p14, complete sequence.
ACO05028
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Direct Submission
Submitsed (12-JUN-1998) Genome Sequencing Center, Washington
Submitted (12-JUN-1998) Genome Sequencing Center, Washington
University School of Medicine, 4444 Forest Parkway, St. Louis,
MO 63108, USA
4 (bases 1 to 189279)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1892?)
Sulston,J.E. and Waterston,R.
4174 TIGAGGAACAACCIGGCACAACAGCAAGGACAIGTAAGIGATGGCAACCAGGACGTACAGG 4233
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Missouri 63108,
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Park Avenue, St. Louis, Missouri 63108,
                                                               4423 GCTGGTTCATTCTCTATTTCAGACGCCAGCTGCCTGCTACAGGGGA---CCAGCGCCAAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strong, C., Tin Wollam, A. and Mead, Kelly.
The sequence of Homo sapiens BAC clone GS1-539F22
Unpublished (2001)
3 (bases 1 to 189279)
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Park Avenue, St. Louis,
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Genome Res. 8 (11), 1097-1108 (1998)
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5 (bases 1 to 189279)
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6 (bases 1 to 189279)
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The sequence of this clone was established as part of a mapping and sequencing collaboration between the NHGRI Chromosome 7 Mapping Project (Eric D. Green, Director), John D. McPherson in the Department of Genetics (Washington University), and the Washington University Genome Sequencing Center. For additional information about the map position of this sequence, see http://www.nhgri.nih.gov, or see http://genome.wustl.edu/gsc
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA On Jun 4, 2002 this sequence version replaced g1:3419842.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The clone sequenced to the left is GS1-512121, 200 bp overlap; the clone sequenced to the right is GS1-489114, 200 bp overlap. Actual start of this clone is at base position 1 of GS1-539F22; actual end is at base position 189279 of GS1-539F22.
                                                                                                                                                                                                                                                                                                                                                                       NOTICE: This sequence may not represent the entire insert of this clone. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap between neighboring data submissions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           all regions were double stranded, sequenced with an alternate chemistry, or covered by high quality data (i.e., phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats, all regions were covered by sequence from more than one subclone; and the assembly was confirmed by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This clone is from the first BAC library from Genome Systems, Inc. (http://www.genomesystems.com).
Cell line: lymphoblastoid
Haplotypes: two
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                                                                                              Center: Washington University Genome Sequencing Center
Center code: WUGSC
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Location/Qualifiers
1. .189279
                                                                                                                                                                Web site: http://genome.wustl.edu/gsc
Contact: sapiens@watson.wustl.edu
                                                                                                                                                                                                                                      Center project name: H_GS539F22
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/db_xref="taxon:9606"
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6473. 6548
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/rpt_family="AcHobo"
7280. .7435
/rpt_family="MER1_type"
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/clone="GS1-539F22"
/clone_lib="GSBAC1"
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2358. .2647
/rpt_family="Alu"
2981. .3255
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5513. .5671
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/rpt_family="L2"
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15373. .15514
/rpt_family="MER1_type"
15632. .15780
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20749. .2107
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30675. .31304
/rpt_family="MER2_type"
33346. .33499
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23764. .23938
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/note="similar to 36910. .36999
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26480. .26683
/rpt_family="L1"
26696. .27279
/rpt_family="ERV1"
27312. .27433
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/rpt_family="ERV1"
27571. 27879
/rpt_family="Alu"
28055. 28171
/rpt_family="ERVL"
8109. .8292
                                                              /rpt_family="L1"
10627. :10933
/rpt_family="Alu"
11661. :11760
12249. :1256
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/rpt_family="L1"
15851. .16028
/rpt_family="Alu"
16038. .16325
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16346 . 16596
/rpt_family=L1"
16822 . 16977
/rpt_family=L1"
17040 . 17436
                               /rpt_family="Malk'
8480. .8566
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17703. .17913
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20452. .20602
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21056. .21221
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24479. .24768
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35742. .36220
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12710. .13001
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14383. 146.5
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33691. .33741
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13120. .13307
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15037. .15350
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18138. .18275
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/rpt_family="L2"
34405. .34701
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176049 ACGCCTCGCGCCCCTCCAGCGAAGCCAGAGCGACGCCTGCCCAGCCTGCTCAGCC 175990
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Pred. No. 0;
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/rpt_family="MER2_type"
37118. .37375
/rpt_family="MER2_type"
37383. .37436
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/rpt_family="MaLR"
39158. 40105
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38569. 38756
/rpt_family="ERVL"
38819. 39057
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37554. 37754
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37768. .38169
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ACTCGTCCCCTGTCCTCCCAGCATCACCGAGACGTCACCTGGAGTCCCTGACCATGG 175510 ACGCTGATGCCAACCTGCAGCATGACGATCCTCCCGGACGACGTCCCTGACCATGG 175510 ACGCTGATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGACGTGGTGCAGTATTTAA 3355 [ATTCCCAGAACCAGGGTACGAGCAGCACTTCCCCAGCGCCCTCCGGACGACGACAGCA 175390 AAGTGCCCCACGGGCCCGGTGACTTGACGCCCCGCGGCCGACAGCAGCCTGCCGGACGACGCGCGGGCGG	AGCAGTICCAIGCCTCGAGCAGCCCTGCCCCGAGGAAAACGACCTGCCCATC 3535 	agtggaacgaagtcagctccggaagcgccgacctgtcctcctccaagctcaagtgtgggc 3595 	CGCGGCCCGCTGTGCCGCAGACTCGCGCCTTTGGGTTCTGCAACGGCATGGTCGTCCACC 3655 	CGCAGAACCCCTTGAGGAGCGGGCCTGCTGGGGGCTATCAGACCCTCGGGGAGAACAGCA 3715 	ACCCCTACGGTGGCCCAGAGCACTTGATGCTCCACAACAGCCCCGGAAGTGGCACCAGTG 3775 	GAAACGCCTTCCATGAACAGCCCTGTAAGGCCCCGCAGTATGGGAACTGTCTCAACAGGC 3835 	AGCCAGTGCCCCTGGTGCACTCGACGGTGCCTGTGCTGCCGGATTCAAGCCTCAAAGC 3895 	TGAAGAGCACCCCCATGCAAGGGAGCGGGGCCAGCTGAATTTCGGCCTGCCGGTAGCGC 3955 	CAAATGAGTCAGCTGGCAGCATGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGG 4015 	GGTACCTGGCTCACCAGCTCCTCGGCGACAGCATGCAGCACCCGGGGGCAGGCCGCCCCG 4075 	GTCAGCACATGCTTGGGCAGATTAGTGCTACCTCACATCAACATCTACCAAGGGCCAG 4135 	AGAGCTGCCAGGGGCTCACGGCATGGGCAGCCGCCAGCGTTGGCAGTTGTCA 4195 	GGGCTACCAGCCATGTGCCAGCTTTGGGGGAGAGCGCCAGGCTATGCCGAGGGACA 4255 	GCCTTGCTCTGCAGTCAGGACACCTCAGTGACACAGACCTGCAGGGTGAATGGTA 4315 	TCAAGATGGAGATGAAAGGGCAGCCCCATCCGCTGTGCTCTAATCTGCAGAATTACTCTG 4375
Db 175569 AC Qy 3296 AC Db 175509 AC Qy 3356 AT	Db 175449 AT Oy 3416 AA Db 175389 AA	Qy 3476 AG Db 175329 AG	Qy 3536 AG Db 175269 AG	Oy 3596 CG Db 175209 CG	3656 175149	3716 175089	3776 175029	3836 174969	3896	3956 174849	90 4016 GG 174789 GG	4076	4136	4196	Oy 4256 GC Db 174549 GC	Qy 4316 TC

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Db 174369 CTATTTCAGACGCCAGCTGCCTACAGGGACCAGCGCCAAAAACTCTGAGTTACTT 174310
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DA 174070 GACATGAGTTCTTTGCTGACCTCCCTAGCGGAAGAAAAGCAAATTCCTTGCAGTTATGCAA 174011
Db 174489 TCAAGATGGAGATGAAAGGGCAGCCCCATCCGCTGTGCTCTAATCTGCAGAATTACTCTG 174430
                                                                                                                    Db 174429 GTCAGTTCTATGACCAAACCGTGGGCTTCAGTCAGCAAGACACGAAAGCTGGTTCATTCT 174370
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                                                          4376 GTCAGTTCTATGACCAAACCGTGGGCTTCAGTCAGCAAGACACGAAAGCTGGTTCATTCT
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ALU42461 6695 bp mRNA linear VRT 26-APR-1996 Xenopus laevis neural specific DNA binding protein (Xgl13) mRNA, complete cds. An-essential role for Xenopus Gli-type zinc finger proteins in the early embryonic patterning of mesoderm and neuroectoderm Cell (1996) In press 2 (bases 1 to 6695) Marine, J.-C., Bellefroid, E.J., Samain, H.P., Martial, J.A. and Pieler, T. Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus. 1 (bases 1 to 6695) Marine, J.-C., Bellefroid, E.J., Pendeville, H., Martial, J.A. Pieler, T. U42461 U42461.1 GI:1150835 Xenopus laevis. Xenopus laevis DEFINITION ORGANISM REFERENCE AUTHORS RESULT 8 XLU42461 ACCESSION VERSION KEYWORDS SOURCE REFERENCE AUTHORS JOURNAL TITLE LOCUS

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AARGLSPTDVPHAGISPAEYYHOMALIAGGRSPYADIEPSPATAGGAANALHMETLHA
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                                                                                                                                                                                                                                                                                                                                                                                        SPGQTYHRERRNAIAMQPQGGQGLGKISEEPSTSSEERASLIKKELHGSITHLPEPSV
Direct Submission
Submittae (07-DEC-1995) Jean-Christophe Marine, Laboratory of
Genetic Engeneering and Molecular Biology, University of Liege,
Allee du 6 Aout, Batiment B6-Chimie, Sart Tilman, Liege 4000,
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                                                                                                                                  /organism="Xenopus laevis"
/db_xref="taxon:8355"
/dev_stage="17 and 21 days"
1. .6695
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Pred. No. 0;
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                                                                                          Location/Qualifiers
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Qy 13	1382 TCCCCAGCC	SCCCGAAGGAACAACCTTGTCAAGG 1441
Dp 16	1629 ATCCAAGCCCTGG	SCCAGATGGATGACTCTGGTGAAG 1688
Ωy 14	1442 AGGAAGGGAA	rgaagtcatctatgagacaaactgcc 1501
Dp 16	1689 AGGAGG	rgaagrggrcrargagacaaacrgcc 1748
Oy 15 Db 17	1502 ACTGGGAAGGCTGCGCAGGAGTTCGACACCCAAGAGCAGCTTGTGCACCATATAAATA	AGAGCAGCTTGTGCACCATATAAATA 1561
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7 7		TTCCACTGCAACCAGCCCTTGCTT 2341
Qy 23		SATGGAGCACGTAAAACTAGAAAGGC 2401
Db 25	2589 TACACGGAAGGAGGGTTATGACAGGAACCAAATG	SATGGAGCAAATAAAGTTGAAAAA 2648
0y 24	/ 2402 TAAAACAAGTGAATGGAATGTTTCCGCGACTGAACCCCATTCTACCCCCTAAAGCCCCTG	CCCATTCTACCCCTAAAGCCCCTG 2461

3128 3118 3428 3478 AGTTCCATGCCCTCGAGCAGCCCTGCCCCGAGGGCAGCAAAACCGACCTGCCCATTCAGT 3538 CGCGCCGCTCCAGCGAAGCCAGAGCGACGGCCTGCCCAGCCTGCTCAGCCTCACGC CAAGAGATTGTAGATTATCACCTCTTCCGTCGGTCAATGTCCCAGGGAGATGTAGTGTAGTGTAG TAAGGTTCAACAGTCTAAACAAGGTTATTCCTCCAGATGTCCCACCACTATGGAAAGGC CAGAAGGCAATTTTGATGACGAGGATTTACTGCCAGATGACATGGTTCAGTATCTTAACT GCTCCTCAGGGATCTCGCCCTGCTTCTCCAGCCGCCGCTCCAGCGAGGCGTCACAGGCCG CCGCCCAGCAGTACCGCCTCAAGGCCAAGTACGCGGCTGCCACAGGAGGGCCGCCGCCGA GGGGAGCCCACGGCTACGGGCGCGCCACCTGCAGCCGCACGATGCGCTGGGCCACGGCG TGCCCCACGGGCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCACGCTGGCCAGC CCATGACGCTTCTCCCGGGCAGAAGCGACCTCTCTGGGGGTGGACGTCACTATGCTGAACA TGCTCAACAGAAGGGACAGCAGCGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCC CCCTCGAGCCTGGCGT----GGCCCTGCCTCCAGTTCATGCCCCGAGGAGGTGCAGCGACG CGCGCTTCAGCAGCCTCAGCAGCTGCAACCCCCGGCGATGGCCACGTCCGCGGAGAAGC GCAGTCTCGTGCTTCAGAATTACACGCGGCCCGAGGGCGGCCAGTCCCGAAACTTCCACT CCCAGAACCAAGCAGGGTACGAGCAGCACTTCCCCAGCGCCCTCCCGGACGACAAAG AGGCCGCCGCCGCAGAACGTGAGCGTGGCCGACTCCTACGACCCCCATCTCCACCGACGCCT GCAATITAAGTCTTCAAAACTATACCCGCAATGTG-------T CTGATGCCAACCTGAACGATGAGGATTTCCTGCCGGACGACGTGGTGCAGTATTTAAATT 2649 2462 2709 2522 2769 2642 2889 2762 3009 2822 3069 2882 3129 2942 3189 2999 3249 3059 3309 3119 3369 3179 3429 3239 3465 3525 3359 3585 3419 3479 2582 2829 2702 3299 g δy g q qq g δy Ob ōλ Ωp QQ QQ Ωp Db QΥ qq δy ρp Db δλ QQ g QQ δy δy Q_{Y} Q δ ÓΥ οy δy δy QΥ δy QΥ

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3702 AGTTCCACAGTAGTGAACAAACAG	3539 GGAACGAAGTCAGCTCCGGAAGCC 3762 GGAATGAAGTAAGCTCTGGCAGTC	3599 GGCCCGCTGTGCCGCAGACTCGCC	3659 AGAACCCTIGAGGAGCGGCCTC	3719 CCTACGGTGGCCCAGAGCACTTGF	3779 ACGCCTTCCATGAACAGCCCTGTA 1	3839 CAGTGGCCCCTGGTGCACTCGACC 1 1 1 1 1 4047 CACTGGGACATTCTGCAACAGACAA	3899 AGAGCACCCCCATGCAAGGGAGCC	3959 ATGAGTCAGCTGGCAGCATGTGTGTGTGTGTGTGTGTGTG	4019 ACCTGGCTCACCAGCTCCTCGGC 1 1 1 1 4227 TCATGCAACAAATGACAGCTGAAA	4079 AGCAGATGCTTGGGCAGATTAGTG	4139 GCTGCCAGGGGCTCACGGC 	4199 GCTACCAGCCATGTGCCAGCTTTC	4259 ITGCTCTGCAGTCAGGACAGCTCJ	4316 TCAAGATGGAGATGAAAGGCAGG 1 1 1 1 1 1 1 1 1	4376 GTCAGITCIATGACCAACCGTG 	4436 CTATTTCAGACGCCAGCTGCCTGC	4493 TTTCCCAGGTGCTAATCAGGTG 4695 TTCACCTGGGGCTAACCACGTG	4553 AAGGGGTACAGATTGACTTCGATG
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases I to 122169)
Beckstrom-Sternberg, S.M., Benjamin, B., Bouffard, G.G., Dietrich, N.L., Eagle, W.O., Gan, W., Gupta, J., Ho, S.-L., Huang, M.C., Idol, J., Lee-Lin, S.-Q., Maduro, Q.L., Maduro, V.B., Mastrian, S.D., McCloskey, J.C., Morse, E., Ojdud, M.A., Pearson, R., Stantripop, S., Summers, T.J., Thomas, J.W., Thomas, P.J., Thomas, P.J., Thomas, P.J., Thomas, P.J., Thomas, P.J., Thomas, J.W., Tran, J.T., Vogt, J.L., Walker, M.A., Wetherby, K.D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AC026814 132169 bp DNA linear HTG 24-MAR-2000 Mus musculus chromosome 13 clone RP23-37788 strain C57BL6/J, WORKING DRAFT SEQUENCE, 8 unordered pieces.
                                                                                                            ------ACTCATTIGTATGTGTGTACTA-TTCAGCAATCTAATCCCA 5076
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           5077 AACAAATGGGATGTATTCCAAGTACATTCCTTTTATGGAATAAGGACTT---AAACCCTA 5133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTATTCTAGGGAGAAACTGTCTTCCATTTCAGTTTTGAATCAGTATTGTTACACTCAA 5032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5134 AAGTGTTATAGGGAGAAATAGTCTTCCATTTCAAGTTTAGACCAGTATTGTCAACCCAAA 5193
                        CAATAGGCTTTAGGAAAAAAAGACTGCAACCGAACGGAAATCAATAGGAGTTGAAGAGATT 4852
4613 CGGGGGCCCTGAGCCCCAAGTATCATTCAGAACCTTTCCCATAGCTCCTCCCGCCTCACCA 4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (24 MAR-2000) NIH Intramural Sequencing Center, 8717 Grovemont Circle, Gaithersburg, MD 20877, USA
                                                                                   CGCCTCGGGCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCACCACAACATGGCTATC
                                                                                                                                                                                                                                                                                                    4991 CAATAACTTAGGAGGGAGAAAATGAACAATGAGCAAGCCCGTA-------
                                                                                                                                                                                                                                                                                                                                                 Sequencing vector: plasmid; n/a; 100% of reads Sequencing vector: plasmid; n/a; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.990319
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Contact: nisc_mouse@nhgri.nih.gov
------ Project Information
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HTG; HTGS_PHASE1; HTGS_DRAFT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCAAGTACGCGGCTGCCACAGGAGGGCCGCCGCCGACGCCCCTGCCCAACATGGAGAGG 2904
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Consensus quality: 128527 bases at least Q40 Consensus quality: 129561 bases at least Q30 Consensus quality: 129466 bases at least Q30 Consensus quality: 129466 bases at least Q20 Insert size: 126000; agarose-fp Insert size: 13169; sum-of-contigs Quality coverage: 10.20x in Q20 bases; agarose-fp Quality coverage: 8.40x in Q20 bases; sum-of-contigs Quality coverage: 9.72x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                   consists of 8 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGACCTCTCTGGGGTGGACGTCACTATGCTGAACATGCTCAACAGAAGGGACAGCAGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTCCTCAGGGATCTCGCCCTGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGCCGACTCCTACGACCCCATCTCCACCGACGCCTCGCGCCGCTCCAGCGAAGCCAGC
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                                                                                                                                                                                                                                                                                                                                                          NOTE: This is a 'working draft' sequence. It currently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               contig of 4268 bp in length
gap of unknown length
contig of 12264 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      contig of 32207 bp in length
gap of unknown length
contig of 22789 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches 518; Indels
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gap of unknown length
10396: contig of 8321 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="RPCI mouse BAC library 26936 c 27202 g 38378 t 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig of 22022 bp in
gap of unknown length
contig of 28223 bp in
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of 22022 bp in
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/db_xref="taxon:10090"
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1. .132169
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89740 CTCCTGCCAGATGATGTGGTACAGTATTTAAATTCCCAGAACCAAAACAGGGTATGGGCAG 89681
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                                                                                                                                                                   ACAGGCTCCGAGGCCCTGCCCTGCCTGTGCCGCGCTTCAGCAGCCTCAGCAGCTGC
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                                                                                                                                                                                                                                      ATGAGCCTGAAGACGCGCCTGGCGCTGCTCGGGGATGCCCTCGAGCCTGGCGTGGCCCTG
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                                         88840 AGCTATGGGGGTAACAGGCGTCAGGCAATGCCAAGGGGGCAACCTCACTCTGCAACAA 88781
                                                                                           4216 AGCTTTGGGGGCAGCAGGCCAGGCTATGCCGAGGACAGCCTTGCTCTGCAGTCAGGA 4275
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                          3976 ATGGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCTGGCTCACCAGCTC 4035
                                                                             4036 CTCGGCGACAGCATGCAGCACCCGGGGGCAGGCCGCCCCGGTCAGCAGCATGCTTGGGCAG 4095
                                                                                                                                             88720 CAGTCCCAGCAGCTCTGCTCTACCGTGCAGAATTATTCCGGTCAGTTCTATGACCAAACC
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SM Muss musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Lo 1714,
Seckstrom-Sternberg,S.M., Benjamin,B., Blakesley,R.W.,
Bouffard,G.G., Dietrich,N.L., Eagle,W.O., Gupta,J., Ho,S.-L.,
Huang,M.C., Idol,J.J., Lee-Lin,S.-Q., Maduro,U.B.,
Mastrian,S.D., McCloskey,J.C., Morse,E., Ojodu,M.A., Pearson,R.,
Stantripop,S., Summers,T.J., Thomas,J.W., Thomas,P.J.,
Tiongson,E.E., Touchman,J.W., Tran,J.T., Vogt,J.L., Walker,M.A.,
Wetherby,K.D. and Green,E.D.
NISC Mouse Sequencing Initiative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (03-MAY-2000) NIH Intramural Sequencing Center, 8717
                                           AC068502 175144 bp DNA linear HTG 03-MA Mus musculus chromosome 13 clone RP23-305114 strain C57BL6/J, WORKING DRAFT SEQUENCE, 9 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       arbitrary. Gaps between the contigs are repersented as russ of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agarose-fp
pulse-field-gel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NOTE: This is a 'working draft' sequence. It currently consists of 9 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center chone name: 30514

Center chone name: 30514

Sequencing vector: plasmid; n/a; 100% of reads
Sequencing vector: plasmid; n/a; 100% of reads
Chemistry: Dye-terminator Big Dye; 100% of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 170792 bases at least Q10
Consensus quality: 170792 bases at least Q20
Insert size: 177000; pulse-field-gel
Insert size: 177000; pulse-field-gel
Insert size: 175144; sum-of-contigs
Quality coverage: 6.76x in Q20 bases; pulse-field-ge
Quality coverage: 6.83x in Q20 bases; sum-of-contigs
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unknown length
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of 8545 bp in length
unknown length
of 6618 bp in length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grovemont Circle, Gaithersburg, MD 20877, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unknown length
of 21972 bp in l
unknown length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web site: http://www.nisc.nih.gov
Contact: nisc_mouse@nhgri.nih.gov
------ Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unknown
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contig
gap of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Center code: NISC
                                                                                                                                       AC068502.1 GI:7684387
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                                                                 DEFINITION
                                                                                                                                                                                                             ORGANISM
RESULT 10
AC068502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
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                                                                                                                 ACCESSION
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                                                                                                                                                                                                                                                                                                      AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  167082 GGCAGGAGAGAGCCAGCCAGTACTTCCAGGATCCCCTTGCCCTCCCAGCATCACA 167141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   166602 GTGGCTGACTCCTACGATCCCATCTCCACAGATGCTTCAAGGAGGTCCAGCGAGGCCAGC 166661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     167022 AATCCTCCAAATTTGCCTCCATCGGTGGAAAGCGTAGCTTAGTGCTGCAAAATTATACC 167081
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                                                                                                                                                                                                                                                                                             2485 GGCACACAGTCCAACAACACCTGCAGCTTGGGTGGGCCCATGACGCTTCTCCCGGGCAGA 2544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2905 ATGAGCCTGAAGACGCGCCTGGCGCTGCTCGGGGATGCCCTCGAGCCTGGCGTGGCCTG 2964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCCCCCGGCGATGGCCACGTCCGCGGAGAGCGCAGTCTCGTGCTTCAGAATTACACG 3204
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                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGCCGACTCCTACGACCCCATCTCCACGACGCCTCGCGCCGCTCCAGCGAAGCCAGC
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                                                                                                                                                                                                                              32.2%; Score 1625.2; DB 2; Length 175144; 78.7%; Pred. No. 6.4e-294;
                                                                                                                                                                                                                                                               29;
                                                                                                                                                                                 others
                                175144: contig of 37165 bp in length.
                                                                                                                                                                                                                                                               Indels
137979: contig of 32853 bp in length gap of unknown length
                                                                                                                                        /clone="RP23-305J14"
/clone_lib="RPCI mouse BAC library 23"
36056 c 36018 g 50864 t 7 oth
                                                                                                                                                                                                                                                               0; Mismatches 518;
                                                                               /organism="Mus musculus"
/strain="C57BL6/J"
/db_xref="taxon:10090"
/chromosome="13"
                                                Location/Qualifiers
                                                                 .175144
                                                                                                                                                                                                                                          Best Local Similarity 78.7 Matches 2025; Conservative
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DD 167202 CTCCTGCCAGATGATGTGCTACAGTATTTAAATTCCCAGAACCAAACAGGGTATGGGCAG 167261
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db 168222 CAGTCCCAGCAGCTCTGCTACCGTGCAGAATTATTCCGGTCAGTTCTATGACCAAACC 168281
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3325 TTCCTGCCGGACGACGTGCTGCAGTATTTAAATTCCCAGAACCAAGCAGGGTACGAGCAG
                                                                                                                                                     3445 GCGCCCGGGCTGCCAGACAGCCACGCTGGCCAGCAGTTCCATGCCCTCGAGCCCTGC
                                                                                                                                                                          D 167322 TTAGCAGGCTGCCAGACAGTCATGGTTGCCAGGAGTACCCAGCTCGAGCCCTGC
                                                                                                                                                                                                                                                     Db 167442 GATCTGTCATCCTCCAAGCTGAAGTGTGGGTCAGCAGCGCCCTAGCGCACAGCAGCACACCGG
                                                                                                                                                                                                                                                                                                                                                                                        GCCTTTGGGTTCTGCAACGGCATGGTCGTCCACCCGCAGAACCCCTTGA-----GGAGC
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                                                                                                                                                                                                                                  CCCGAGGCCAGCAAAACCGACCTGCCCATTCAGTGGAACGAAGTCAGCTCCGGAAGCGCC
                                                                                                                                                                                                                                                                                                             GACCTGTCCTCCTCCAAGCTCAAGTGTGGGCCGCGCCCGCT---GTGCCGCAGACTCGC
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
                   168282 ATGGGCTTCAGTCAGCAAGACAGGAAAGCTGGCTCGTTCTCCCTCTCAGATGCCAACTGC 168341
                                                 Db 168641 CTCCCTTGCAGAAGAAGCAAGTTCCTTGCAGTTATGCAGTAGGCGGTAGGCAAGGAGGA 168700
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4396 GTGGGCTTCAGTCAGCAAGACACGAAAGCTGGTTCATTCTCTATTTCAGACGCCAGCTGC 4455
                                                                              ACAAGCACAGTGGACAGCCTCGACAGCCATGACCTGGAAGGGGGTACAGATTGACTTCGAT 4575
                                                                                                                    GCCATCATAGACGATGGGGACCACTCCAGCCTGATGTCGGGGGCCCTGAGCCCAAGTATC 4635
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Direct Submission
Submitted (OB-SEP-2000) Genetics, Harvard Medical School, 200
Longwood Ave., Boston, MA 02115, USA
Loration/Qualifiers
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1. 2175
/db_xref="taxon:9031"
                                       CTGCTACAGGGGACCAGCGCCAAAAACTCTGAGTTACTTTCCCCCAGGTGCTAATCAGGTG
                                                                                                                                                                                                                                       CTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGACTTTGTTTTGGCTGTT
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Similar expression and regulation of Gli2 and Gli3 in the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gallus gallus Gli3 mRNA, partial AF303886
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HSPPLLAPPTPPTQRTIPGTPSALSPALSFTYPPTPVSLQQMHQQIISRQQTLGSAFG
HRSPLLHPSPTFPTQRTIPGTPSALSPALSFTYPPTPSPSESTQQMHQTSESSYOSTGDBMHN
KRSKIK PDEDLLASGGSGSQDGDPEGWTPWREGGNFDBSRQPFEBVYFTHCHWBGCSRF
FDTQDEQLVHHINNDHIHGEKREFVCRMLDCSREQKPFRAQYMLVVHMRRHTGEKPHKC
TFGGTTAR STALBULKTHLRSHTGEKPYVCBHEGGCNRAFSRASDRARIGNRTHSREY
TVCKI PGGTRYTDPSSLKRHYWTHGPEAHTTRKQRGDIHPRPPPRDGSHSGTRS
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RYYEVBPSIPIPPLHVBSALSSSPTXSDLPFIRISPHNPAAASESBFSTPHPYINYMD
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AGAGALHMEYLHAMDSTRFPSPRLSARPSRKRTLSISPLSDHSPDLQYMIRTSPRNSLV
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ERLKQVNGMLPRLNPVPPSKAPTLPPLIGNGTQSNSSCSVGGS"
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Pred. No. 1.1e-285;
0; Mismatches 351; Indels 6;
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/db_xref="GI:10764819"
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/codon_start=1
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1081 ACCCCGGTAAAGGAGGAGACAGACAAAGATGAAAGCAAAACGAGCCTGAAGTGGTCTAC 1140 GAGACAAACTGCCACTGGGAAGGCTGCGCGAGGGAGTTCGACACCCCAAGAGCAGCTTGTG 1548 AGGACTCATTCAAATGAAAAACCATATGTTTGCAAGATCCCAGGCTGCACAAAGCGCTAT 1560 CACTCTCAGACACGATCACCAGGCCAGCAGACTCAGGGTGCGACTGGGGGAGCAGAAGGAC 1740 2149' AAGCCAATGACATCTCAGCCAAGCCCTGGTGGTCAGTCTTCATGCAGCAGCAAGAGTCC 2208 CTGAACCCCGTCCAGGTCAGCTCCGGCCCTTCTGAGTCCTCA---CAGAACAAGCCCACG 1308 AGTGAGTCTGCAGTGAGCAGCACTGGTGACCCGATGCACAACAAGAGGTCCAAGATCAAA 1368 CCCGATGAAGACCTCCCCAGCCCAGGGGCTCGGGGGCAGCAGGAACAGCCCGAAGGAACA 1428 CACCATATAAATAACGACCATATTCATGGAGAGAAGAAGGAGTTCGTGTGCAGGTGGCTG 1608 GCAATCAGCCCTGCCTTGAGCTTCACCTACTCTTCCGCGCCCGTCTCTCT---CACATG 1131 CATCAGCAGATCCTAAGCCGACAACAGAGCTTAGGTTCAGCCTTTGGACACAGCCCTCCA 841 CICAICCAICCIGCICCAACITITCCIACCCAGAGACCIAICCCIGGCAICCCAGIGIC ACCCTTGTCAAGGAGGAAGGGGACAAAGATGAAAGCAAACAGGAGCCTGAAGTCATCTAT AGAACGCATTCCAATGAGAAACCATATGTGTGCAAAATCCCAGGCTGCACTAAGCGTTAC CTCAGCAACACTACCTCAAAGCGGGGAAGAATGCCTCCAGGTGAAAACCGTCAAGGCAGAG CTCATCCACCTGCCCCAACTTTTCCAACAGAGGCCTATTCCAGGGATCCCTACGGTT AGACACGGGGGGAGAGCCTCACAAATGCACTTTTGAAGGTTGCACAAAGGCCTACTCG AGACTAGAAAACTTGAAAACACTTGAGATCTCACACTGGAGAGAAACCATACGTCTGT GAGCACGAAGGTTGCAACAAGGCTTTCTCAAATGCCTCTGATCGCGCCCAAACACCAAAAC ACAGACCCAAGCTCCCTCCGGAAACATGTGAAGACAGTGCATGGCCCCAGAGGCTCATGTC ACCAAGAAGCAGCGAGGGGACATCCATCCTCGGCCGCCACCCCCGAGAGATTCCGGCAGC CATTCACAGTCCAGGTCGCCTGGCCGACCGACTCAGGGAGCCCTTGGTGAGCAGCAGGAC 1501 1075 721 1132 781 1192 1252 1309 961 1369 1429 1489 1141 1549 1201 1609 1261 1669 1321 1729 1381 1789 1441 1849 1909 1561 1969 1621 2029 1681 2089 1741 g g \$0\$1ed \$rom \$123 US 20 C3 C59 28 can \$1480 38 - **2084**3 qq ŏ q g ð ò g g g ò ò ŏ ò

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Barbarida, M. Adams, C., Adio-Oduola, B., Ali-Osman, F.R., Allen, C., Alsbrooks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Barbaroks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Barbarid, J., Benton, J., Bimage, K., Blankenburg, K., Bonnin, D., Buchs, J., Burket, C., Burrell, K., Byrd, N.C., Carron, T.F., Carter, M., Cavazos, S.R., Chacko, J., Chavaz, D., Chavaz, D., Chen, G., Chen, R., Chen, Z., Chowdhry, I., Christopoulos, C., Corlen, G., Chen, Z., Chowdhry, I., Dathorne, S.R., David, R., Delaney, K.R., Delyado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Delyado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Delyado, O., Pang, R.C., Escotto, M., Farlls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Frantz, P., Garrell, J.H., Gavara, M., Garner, T., Gazza, N., Gall, R., Gao, J., Garcia, A., Garner, T., Gazza, Hennandez, C., Harris, K., Hart, M., Hala, S., Hamitton, K., Harris, K., Hart, M., Hala, S., Hamitton, K., Hennandez, O., Hoddson, A., Hagues, M., Holloway, C., Hollins, B., Homei, S., Hoddson, A., Hodgues, M., Holloway, C., Hollins, B., Howard, S., Huber, J., Hulyk, S., Hume, J., Jackson, L.E., Jacobson, B., Jah, Y., Johnson, R., Jolivet, S., Joudah, S., Li, X., Lu, X., Lu, K., Lu, M., Loulseqed, H., Lozado, R.J., Lu, X., Lucier, A., Lall, W., Lall, W., Loulseqed, H., Lozado, R.J., Lu, X., Lucier, A., Lu, Y., Liu, W., Loulseqed, M., Li, Z., Li, Z., Li, M., Luder, M., Martin, R., Patch, R., Patch HTG 19-JUL-2002 Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; ארבושם 186926 bp DNA linear HTG 19-JUL-2 Rattus norvegicus clone CH230-18L16, *** SEQUENCING IN PROGRESS ***, 78 bu nordered pieces. AAACCAATGACATCTCAGCCAAGCCCTGGTGGTCAGTCTACATGCAGCAGCGGAACAGTCC 1860 2041 AAATTAGAAAGGTTGAAACAAGTTAATGGAATGCTTCCAAGACTGAAACCCCGTTCCACCT AAACTAGAAAGGCTAAAACAAGTGAATGGAATGTTCCGCGACTGAACCCCATTCTACCC GGAGACCTCAGTGCCATGGAAGCCCCAATCATGGACTCAACCATTTCCACTGCAACC CCCATCAGCAACTATTCCAACAGTGGGCTCGAGCTTCCTCTGACCGATGGAGGTAGTATA Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia; AC128489.1 GI:21909214 (bases 1 to 186926) AGCITGGGTGGGCCC 2523 AGTGTAGGAGGATCC 2175 Rattus norvegicus. Rattus norvegicus HTG; HTGS_PHASE1 AC128489 Rattus. DEFINITION AC128489/c 1801 1861 2269 1921 2329 1981 2509 2161 ORGANISM 2209 2389 RESULT 12 ACCESSION KEYWORDS SOURCE REFERENCE VERSION q Qγ 염 ΩŽ q δ q Qγ q ÓΥ ŏ g

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Scherer, S., Scott, G., Shen, H., Shooshtari, N., Sisson, I., Sodergren, E., Sonaike, T., Sparks, A., Stanley, H., Stone, H., Sutton, A., Svatek, A., Tabor, P., Tamerisa, A., Tamerisa, K., Tang, H., Tansey, J., Taylor, C., Taylor, T., Telfrod, B., Thomas, N., Thomas, S., Usmani, K., Vasquez, L., Vera, V., Villalon, D., Vinson, R., Wang, O., Wand-Moore, S., Warren, R., Washington, C., Watlington, S., Wulliams, G., Williams, G., Walliams, G., Walliams, G., Wulliams, G., Wulliams, G., Wulliams, G., Wulliams, G., Wulliams, G., Wolley, R., Wooden, S., Weistock, G. and Gibbs, R.

Direct Submission
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Worley, K.C.
Direct Submission
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                     GACACCAGGAGGAAGGTACCATTATGACCCTCACTGTCCACAGTGTACACGGGCCTC 356
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GACATCATGAGGGCCGTTACCATTACGATCCATCTCCGATTCCTCCATTGCATATGACTT
                                                                     CCGCCTTATCTAGTAGCCCTACGTATCCGGACCTGCCCTTCATTAGGATCTCCCCACACC
                                                                                                    ccacccraagregcasccrescarcreagararcrecrisaracsacriticrescac---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (04-JUL-1996) D.C. Hughes, University of Nottingham, MRC Institute of Hearing Research, University Park, Nottingham, Notts,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 5849)
                                                                                                                                                                                              107401 AATGTCAGGGGCCTTGAGCCCCAGTATCATTCAGAACCTTTCCCACAGCTCCTCCCGTCT 107342
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                                                   107521 GTTACTTTCCCCAGGTGTTAACCAGGTGACCAGGACACAGTTGAGAGTTTGAGAGTCATGA 107462
                                                                                                                        107461 CCTAGAAGGCGTGCAGATTGATTTTGATGCCATCATAGATGAGGGGACCATACCAGCCT 107402
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                                    GTTACTTTCCCCAGGTGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGACAGCCATGA 4547
                                                                                                        CCTGGAAGGGGTACAGATTGACTTCGATGCCATCATAGACGATGGGGACCACTCCAGCCT 4607
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                                                                                                                                                                           4608 GATGTCGGGGGCCCTGAGCCCAAGTATCATTCAGAACCTTTCCATAGCTCCTCCCGCCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17.1%; Score 864.8; DB 10; Length 5849; illarity 60.3%; Pred. No. 1.4e-151; Conservative 0; Mismatches 1067; Indels 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
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1659 ACGAAGGCTGTAACAAAGCCTTCTCCAATGCCTCAGACCGCCCAAGCACCAGAACCGCA 1718
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            1359 CCAACTGCCACTGGGCAGACTGCACCAAGGAGTATGACACACAGGAGCAGCTGGTGCATC
                                                           1479 GCACGAGAGAGCAGAAGCCCTTCAAGGCCCAGTACCTGGTTGTTCACATGCGCAGAC
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                                           ATATAAATAACGACCATATTCATGGAGAGGAGGAGGTTCGTGTGCAGGTGGCTGGACT
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Eukaryota, Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Kanopodinae; Xenopodinae; Xenopous.

1 (bases 1 to 4517)

Lee, J., Platt, K.A., Censullo, P. and Ruiz i Altaba, A.

Gill is a target of Sonic hedgehog that induces ventral neural tube development
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Xenopus laevis zinc finger protein G112 (G112) mRNA, complete cds.
AF109923
2430 TGACCGAAGTGACGATGCTGAGCCAGCTGCAGGAACGAAGAGACAGCTCCACCAGCACCA 2489
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                                                       TGAGCTCGGCCTACACTGTGAGCCGCCGCTCCTCGGCATCTCCCCATACTTCTCTAGCC
                                                                                        GCCGCTCCAGCGAGGCGTCACAGGCCCGAGGGC----CGGCCGCAGAACGTGAGCGTGGCCG
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Development 124 (13), 2537-2552 (1997) 97359968

AUTHORS TITLE

JOURNAL MEDLINE

REFERENCE

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NPATELPHINDYLLINGLINGERDSTESTILSSAYTSRESGISPERSSETSOFGE
RIANSSSADSYDPTSTANDRINGLINGLINGERDSTESSTILSSAYTSRESGISPERSSETSOFGE
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LPSIPAGISNMAIGDMSSMLTTLAEESKFINLMS"
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AFSNASDRAKHQNRTHSNBKPYICK PGCTRRYTDPSSLKRHWTVHGPEAHYTKKYR
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RSPSPHPINTWYAYQULSQORSLSSFGHPILLHSPSPFRARSOQGVILTSANDAPPSNNN
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CKQEPDIIYETNCHWDGCSKEFDTQDQLVHHINNDHIHGEKKEFVCRWQECSREQKPF
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/gene="Gli2"
/note="similar to Mus musculus Gli2 and Xenopus laevis
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York, NY 10016, USA
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/protein_id="AAD28180.1"
/db_xref="G1:4704617"
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Brewster, R. and Ruiz i Altaba, A.
Direct Submission
Submitted (28-NOV-1998) Cell Biology,
Medical Center, 540 First Avenue, New
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/db_xref="taxon:8355"
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261 AGTITGCCCATGCCCACTATGTCAGCCCCCACATGGAGCATTACCTG------C

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TAAGGACGTCTCCCAACTCCTTGGTCACGATTCTCAATAATTCCCGTAGCAGCTCTTCAG 1042
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                                                                                                                                                 AGTCTTCATGCAGCAGCCAACAGTCCCCCATCAGCAACTATTCCAACAGTGGGCTCGAGC
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                                                 1763 ACACTGGAGAGAAACCATACGTCTGTGAGCACGAAGGTTGCAACAAGGCTTTCTCAAATG
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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Xenopus laevis neural specific DNA binding protein (Xgli4) mRNA,
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1 (bases 1 to 4641)
Marine,J.-C., Bellefroid,E.J., Pendeville,H., Martial,J.A. and
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Submitted (07-DEC-1995) Jean-Christophe Marine, Laboratory of
Genetic engenering and Molecular Biology, University of Liege,
Allee du 6 Aout, Batiment B6-Chimie, Sart Tilman, Liege 4000,
Belgium
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2 (bases 1 to 4641)
Marine, J.-C., Bellefroid, E.J., Samain, H.P., Martial, J.A. and
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PPPGTTPTEYCHQMAFLASHASPYGELLVQSAAAGNTSHLHDYLTPWDVSRFSSPRVT
PRLSRKRALSISPLSDASIDLQTMIRTSPNSLVAYINNSRSSSAASGSYGHLSAGAIS
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neural specific;evidence=experimental"
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1340 CGATGCACAACAAGAGGTCCAAGATCAAACCGGGATGAAGACGTCCCCAGCCCAGGGGGTC 1399
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AGTCTCGTGCTTCAGAATTACACGCGGCCCGAGGGCGGCCAGTCCCGAAACTTCCACTCG 3240 GAGCCTGGCGTGGCCCTGCCTCCAGTTCATGCCCCGAGGAGGTGCAGCGACGGGGGAGCC 3006 CACGGCTACGGCGCGCGCCACCTGCAGCCGCACGATGCGCTGGGCCACGGCGTGAGGAGG GCCAGCGACCCGGTGCGGA-----CAGGCTCCGAGGGCCTGGCCCTGCCTCGTGTGCCG TCCCCCTGTCCTCCCAGCATCACCGAGAACGTCACCCTGGAGTCCCTGACCATGGACGCT GATGCCAACCTGAACGATGAGGATTTCCTG - - - CCGGACGACGTGGTGCAGTATTTAAAT AATG----CAGGACTAACCCCCATGTATCCCCATGAAATTCCGGGGAATAATTCAAGGCGG CGCTTCAGCAGCCTCAGCAGCTGCAACCCCCGGCGATGGCCACGTCCGCGGGAGAAGCGC TCTCAGAACAGAGGCCCCAGAGCCAAAACCTAC 3038 TCCCAGAACCAAGCAGGTACGAGCAGCACTTCC 3391 2651 2708 3121 2768 3181 2885 2945 3005 3007 3067 2828 3241 3301 3358 qq qq Db δλ Óγ QQ Qγ Dp oγ Dp Qγ qq δŽ Ω

Search completed: December 10, 2002, 23:45:11 Job time : 10029 secs

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 81)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

L Onpublished (1999)

L Onpublished (1999)

L Onpublished (1999)

Email: cgapbs-rémail.nih.gov

Tissue Procurement: ATCC

CONA Library Preparation: Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://mage.llnl.gov

Plate: LLOM2463 row: o column: 06

High quality sequence stop: 693.
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         GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.
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Copied from PCTUS2003092 on 04-03-2004

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/tissue_type="epidermoid carcinoma, cell line"
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Site_2: EcoRi; coNA made by oligo-dT priming.

Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGCACGAG(G). Library constructed
by Ling Hong in the laboratory of Gerald M. Rubin
(University of California, Berkeley) using ZAP-CDNA
synthesis kit (Strangaene) and Supersoript II RT (Life
Technologies). Note: this is a NIH_MGC Library."
253 c 258 g 157 t lothers
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                                                                                                                                                                                                                                                                                                                                                                                                                                       3909 CATGCAAGGGAGCGGGGCCAGCTGAATTTCGGCCTGCCGGTAGCGCCAAATGAGTCAGC 3968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGCAGCATGGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCTGGCTCA 4028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGCTCCTCGGCGACAGCATGCAGCACCCGGGGGGAGGCCGCCCGGTCAGCAGATGCT 4088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGTGCCAGCTTTGGGGGCAGCAGCGCCCAGGCTATGCCGAGGGACAGCCTTGCTCTGCA 4268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCAGGACAGCTCAGTGACACAAGTCAGACCTGCAGGGTGAATGGTATCAAGATGGAGAT 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAAGGGCAGCCCCATCCGCTGTGCTCTAATCTGCAGAATTACTCTGGTCAGTTCTATGA 4388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAAACCGTGGGCTTCAGTCAGCAAGACACGAAAGCTGGTTCATTCTTTTTCAGACGC 4448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCTGCCTGCTACAGGGGACCAGCGCCCAAAAACTCTGAGTTACTTTCCCCCAGGTGCTAA 4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 TGGCAGCATGGTGAATGGCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCTGGCTCA 240
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                                                                                                                                                                                                                                                                                       16; Indels
                                                                                                                                                                                                                                                       Score 826; DB 14;
Pred. No. 8.4e-179;
0; Mismatches 16;
/organism="Homo sapiens"
/db_xref="taxon:9606"
                            /clone="IMAGE:6277469"
/clone_lib="NIH_MGC_102"
                                                                                                                                                                                                                                                         16.3%;
97.9%;
                                                                                                                                                                                                                                                                                   Matches 847; Conservative
                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                          BASE COUNT
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/organism="Homo sapiens"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="IMAGE:5477180"
/clone="IMAGE:5477180"
/clone="IMAGE:5477180"
/clone="type="astrocytoma grade IV, cell line"
/tlssue_type="astrocytoma gr
                                                                                                                                                                                                                                                                                                                                           AGENCOURT_6573939 NIH_MGC_98 homo sapiens cDNA clone IMAGE:5477180 5', mRNA sequence. BM552681
BM552681 GI:18790743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
CTTCGATGCCATCATAGACGATGGGGACCACTCCAGCCTGA--TGTCGGGGGCCCTGAGC 4626
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                                                                781 CTTCGATGCCATCATAGACGATGGGGGACACTCCAGCCTTAATGTCGGGGGGCCCTGAGC 840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 998)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 TACCTGGCTCACCAGCTCCTCGGCGACAGCATGCAGCACCCGGGGGCAGGCCGCCCCGCT 120
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
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High quality sequence stop: 668.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                             4627 CCAAGTATCATTCAGAACCTTTCCC 4651
                                                                                                                                                                                      CCCAATATCATTCCGAACCCTTTCC
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Matches 872; Conservative
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AARBYDBB 890 bp mRNA linear EST 04-JAN-1999 ak54c03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1409764 3' similar to gb:M57609 GLI3 PROTEIN (HUMAN);, mRNA sequence. AA889686
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGCGTCCCTCCCATTCCCAGTCGCTGTCCATGAGCACCACCAACATGGCTATC-GGGG 4736
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                                                                           CTTGCTCTGCAGTCAGGACAGCTCAGTGACACAAGTCAGACCTGCAGGGTGAATGGTATC 4317
                                                                                                                              4377
                                                                                                                                                                                                                                                                                     CCAGGTGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGACAGCCATGACCTGGAAGGG 4557
                                                                                                                                                                                                                                                                                                                                         GTACAGATTGACTTCGATGCCATCATAGACGATGGGGACCACTCCAGCCTGATGTCGGGG 4617
                                                                                                                                                                                                                                                                                                                                                                                           GCCCTGAGCCCCAAGTATCATTCAGAACCTTTCCCATAGCTCCTCCCGCCTCACGCCT 4677
                         GGCTACCAGCCATGTGCCAGCTTTGGGGGCAGCAGGCGCCAGGCTATGCCGAGGGACAGC 4257
                                                                                                                                                                                            181 AGCTGCCTGCCAGGGGCTCACGGCATGGGCAGCCAGCCGTCAAGCTTGGCAGTTGTCAGG 240
                                                                                        840 CAATAGGGCTTTTAGGGAAAAAAAGACTGGCAACCAACGGAAAATCCATAGGGAGTTGGAA 899
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                                                                                                                              AAGATGGAGATGAAAGGGCAGCCCCATCCGCTGTGCTCTAATCTGCAGAATTACTCTGGT
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Unpublished (1997)
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TITLE
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Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov CDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima Bonaldo

JOURNAL

COMMENT

cDNA Library Arrayed by: Greg Lennon, Ph.D.

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Sequencing Center
information can be
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCATCCGCTGTGCTCTAATCTGCAGAATTACTCTGGTCAGTTCTATGACCAAACCGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4460 TACAGGGGACCAGCGCCAAAAACTCTGAGTTACTTTCCCCCAGGTGCTAATCAGGTGACAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1700 TCGCTGTCCATGAGCACCACCAACATGGCTATCGGGGACATGAGTTCTTTGCTGACCTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGTGACACAAGTCAGACCTGCAGGGTGAATGGTATCAAGATGGAGATGAAAGGGCAGC
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DNA Sequencing by: Washington University Genome
Clone distribution: NCI-CGAP clone distribution
                         found through the I.M.A.G.E. Consortium/LLNL at:
www.bio.llnl.gov/bbrp/image/image.html
Insert Length: 995 Std Error: 0.00
Seq Primer: -40ml3 fwd. ET from Amersham
High quality sequence stop: 498.
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 714.6; DB 9;
pred. No. 3.3e-153;
0; Mismatches 17;
                                                                                                                                                               /clone="IMAGE:1409764"
/clone_lib="Soares_testis_NHT"
                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                                 /db_xref="taxon:9606
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                                                                                                                                                                                                          /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 97.0%;
Matches 811; Conservative
                                                                                                                                                                                            /sex="male"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: pME18SFL3; mRNA from uninduced NT2 neuronal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HRI human cDNA project (Ota,T., Wakamatsu,A., Ozawa,M., Ishii,S.,
Saito,K., Yamamoto,J., Nakamura,Y., Nishikawa,T., Nagai,T., Suzuki,Y., Sugano,S., Isogai,T.)
Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalla, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 763)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: genomics@hri.co.jp
HRI human cDNA project; 5'- & 3'-end one pass sequencing: Helix
Research Institute; cDNA library construction: Department of
Virology, Institute of Medical Science, University of Tokyo, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 763)
Ota.T., Wakamatsu.A., Ozawa,M., Ishii,S., Saito,K., Yamamoto,J.,
Nakamura,Y., Nishikawa,T., Nagai,T., Suzuki,Y., Sugano,S. and
                                                                                                                                                                                             4940 TCCTTTTATGGAAAAGGACTCTGAAAAACCCTAAAAGTATTCTAGGGAGAAACTGTCTTCC 4999
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298 AACCAACGAAATCAATAGGAGTTGAAGAGTTAAACTGACTTTGTTTTGGCTGTTTTT 239
                                                                                                               238 TAGTTCTGTATGTATTTTAGCAATCTCATCTCACCTAACTGAGATGTGTTTCAATTATAT 179
                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                            5000 AITICAGITITIGAAICAGIAITGITACACICCAAACCACCCICITITIAAAAAAA 5055
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                                                                                 TAGTICTGTATGTATTTTAGCAATCTCACCTCACCTGAGCTGTGTTTCAATTATAT
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Genomics Laboratory
Hellx Research Institute
1532-3 Yana, Kisarazu, Chiba 292-0812, Japan
Fat: 81-438-52-3975
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/clone="NT2RM2000468"
/clone_lib="NT2RM2"
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OMatches 709; Conserve
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BI830216 702 bp mRNA linear EST 04-OCT-2001 603072918F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5164757 5',
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NIH-WGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3858
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               3619 CGCGCCTTTGGGTTCTGCAACGGCATGGTCGTCCACCCGCAGAACCCCTTGAGGAGCGGG 3678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3679 CCTGCTGGGGGCTATCAGACCCTCGGGGAGAACAGCAACCCCTACGGTGGCCCAGAGCAC 3738
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Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.go.
Plate: LLAM11409 row: d column: 06
181 GAGCAGCACTTCCCCAGCGCCTCCCGGACGACAGCAAAGTGCCCCAGGGCCCGGTGAC 240
                                                                                                                                                                                            241 TTTGACGCCCGGGCTGCCAGACAGCCACGCTGGCCAGCAGTTCCATGCCTCGAGCAG 300
                                                                                                                                                                                                                                                                                           540
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                                                                                                                                                                      3439 TTTGACGCGCCCGGGCTGCCAGACAGCCACGCTGGCCAGCAGTTCCATGCCCTCGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: capabs-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
                                                                        3379 GAGCAGCACTTCCCCAGCGCCCTCCCGGACGACAAAGTGCCCCAGGGGCCCGGTGAC
                                                                                                                                                                                                                                                                  3499 CCCTGCCCCGAGGGCAGCAAAACCGACCTGCCCATTCAGTGGAACGAAGTCAGCTCCGGA
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Location/Qualifiers
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/note="Organ: brain; Vector: pCWV-SPORT6; Site_1: NotI; Site_2: ECORV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (ECORV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library.*
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                         /clone="IMAGE:5164757"
/clone_lib="NIH_MGC_119"
/tissue_type="medulla"
/lab_host="DH10B"
/organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                              Conservative
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AW953518 720 bp mRNA linear EST 01-JUN-2000 EST365588 MAGE resequences, MAGB Homo sapiens cDNA, mRNA sequence.
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Hegde, P., Qi,R., Abernathy,K., Dharap,S., Gaspard,R., Gay,C., Holt, L., Saeed,A.I., Sharov,V., Lee,N.H., Yeatman,T.J. and
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Tel: 301 838 3528
Fax: 301 838 0208
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/db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAGB"
/note="Vector: pBluescriptsKm"
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Pred. No. 7.7e-147;
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                                                                                                                                                                                                                                                        Unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                AW953518.1 GI:8143201
                                                                                                                                                                                                                                                                                                                                                         Email: johnq@tigr.org
Plate: 51
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98.18;
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                                                                                                                                                                                                           603177285F1 NIH_MGC_121 Homo sapiens CDNA clone IMAGE:5241692 5', mRNA sequence.
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3811 CAGTATGGGAACTGTCTCAACAGGCAGCCAGTGGCCCCTGGTGCACTCGACGGTGCCTGT 3870
                                                          Email: cgapbs-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                CTGAATTTCGGCCTGCCGGTAG-CGCCAAATGAGTCAGCTGGCAGCATGGTGAATGGCA 3988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126 CACTCGAACAGATGTGAGCGAGAAAGCCGTTGCCTCCAGCACCACTTCTAATGAGGATGA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          186 AAGTCCTGGACAGACTTATCACAGAGAAGAAGAAACGCAATCACTATGCAGCCACAGAA 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    246 TGTCCAGGGGCTCAGCAAAGTCAGTGAGGAACCTTCAACATCGAGTGACGAGGGGCCTC 305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="HAGE:5241692"
/clone_lib="NHH_MGC_121"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                BI915087
BI915087.1 GI:16179168
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EST 13-FEB-2001
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria: Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 934)
1 (bases 1 to 934)
1 (bases 1 to 1000; Chining Contential Conte
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                                                                                                                                                                                                                                                                                                                            139 TCCTCATCTTTCCCTGCCTTCCATCCTCTATACATGATGCCAGACATCATGAGGG 398
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGCTCCTTGCACAGCAGCCCATCGCTCTCCATGATCTCAGCAACCCGTGGGCTGAGCCC 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can lfound through the I.M.A.G.E. Consortium/LLNL at:
http://image.lln.gov
Plate: LLAM10143 row: p column: 08
High quality sequence stop: 751.
I. 934
                                      TGTCCAGGGGCTCAGCAAAGTCAGTGAGGAACCTTCAACATCGAGTGACGAGAGGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGCCCTACGTATCCGGACCTGCCCTTCATTAGGATCTCCCCACACCGGAACCCCGCTGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      426 TCCTCATCTTTTCCCTGCCTTCCATCCTCCTGTACCAATTGATGCCAGACATCATGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     726 TACAGATGCGCCCCATGCAGGAGTCAGCCCAGCAGAATACTATCATCAGATGGCCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     639 TACAGATGCGCCCCATGCAGGAGTCAGCCCAGCAGAATACTATCATCAGATGGCCCTGCT
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                                                                                                                                                                                                                                                                                      CCGCGGGACGGTGTTTGCCATGGACCCCAGGAATGGTTACATGGAGCCCCACTACCACC
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linear
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us-09-910-185-3.rst

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EST 01-AUG-2002
                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 713)
                                                                                                                                                                                                                                                                                                                                                                                                                    Email: genomics@hri.co.jp
HRI human cDNA project; 5'- & 3'-end one pass sequencing: Helix
Research Institute; cDNA library construction: Department of
Virology, Institute of Medical Science, University of Tokyo, and
                                                                                                                                                                                                          Ota,T., Nishikawa,T., Suzuki,Y., Ishii,S., Saito,K., Kawai,Y.,
Yamamoto,J., Wakamatsu,A., Nakamura,Y., Nagai,T., Sugano,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3425 ACGGGCCCGGTGACTTTGACGCGCCCGGGCTGCCAGACAGCCACGCTGGCCAGGTTCC 3484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCATGAACAGCCCTGTAAGGCCCCGCAGTATGGGAACTGTCTCAACAGGCAGCCAGTGG 3844
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGCCCTCGAGCAGCCCTGCCCCGAGGGAAAACCGACCTGCCCATTCAGTGGAACG 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGTCAGCTCCGGAAGCGCCGACCTGTCCTCCTCCAAGCTCAAGTGTGGGCCGCGGGCCCG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTTGAGGAGCGGCCTGCTGGGGGCTATCAGACCCTCGGGGAGAACAGCAACCCCTACG 3724
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     713 bp mRNA linear EST 01-AU Homo sapiens cDNA clone HEMBB1000032 5', mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="whole embryo, mainly body"
/dev_stage="embryo, 10 weeks"
/note="vector: pWE18SFL3"
/ 235 c 222 g 111 t 3 other:
                                                                                                                                                                                                                                                                                                                                                           1532-3 Yana, Risarzu, Chiba 292-0812, Japan
Tel: 81-438-52-3975
Fax: 81-438-52-3986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 642.8; DB 9;
Pred. No. 9.9e-137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="HEMBB1000032"
/clone_lib="HEMBB1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Helix Research Institute.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                              Helix Research Institute
                                                                              GI:10935366
                                                                                                                                                                                                                                                                     HRI human cDNA project
                                                                                                                                                                                                                                                                                     Unpublished (2000)
Contact: Takao Isogai
Genomics Laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12.7%;
99.7%;
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   AU120131
AU120131 HEMBB1
sequence.
                                                                                                                                   Homo sapiens
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Best Local Similarity
                                                                            AU120131.1
                                                                                                                                                                                                                                                   Sogai, T.
                                                            AU120131
                                                                                                                   human.
                     DEFINITION
                                                                                                                                   ORGANISM
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                                                                                                                                                                                                                                                                 TITLE
JOURNAL
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                                                                                                                                                                                                                                                                                                        4
                             /clone="IMAGE:4415095"
/clone=lib="NHH_MGC_89"
/tissue_type="hypernephroma, cell line"
/tab.host="DH10B (phage-resistant)"
/note="Organ: kidney; Vector: pCMV-SDORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.3 kb. Library enriched for full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
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                                                                                                                                                                                                                                                             Query Match 13.1%; Score 660.6; DB 12; Length 934; Best Local Similarity 97.3%; Pred. No. 8.6e-141; Matches 715; Conservative 0; Mismatches 14; Indels 6;
/organism="Homo sapiens"
/db_xref="taxon:9606"
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ota,T., Nishikawa,T., Suzuki,Y., Ishii,S., Saito,K., Kawai,Y.,
Yamamoto,J., Wakamatsu,A., Nakamura,Y., Nagai,T., Sugano,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1814 TCTCAAATGCCTCTGATCGCGCCAAACACCAAAACAGAACGCATTCCAATGAGAAACCAT 1873
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                                                   CCCCTGGTGCACTCGACGGTGCCTGTGGTGCCGGGATTCAAGCCTCAAAGCTGAAGAGCA 3904
                                                                                                                                                          CCCCCATGCAAGGGAGCGGGGCCAGCTGAATTTCGGCCTGCCGGTAGCGCCAAATGAGT 3964
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1 (bases 1 to 809)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                AU127370 11near E AU127370 NT2RP2 Homo sapiens CDNA clone NT2RP2001145
                                                                                                                                                                                                                                                              1. .809
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="NWIZRP2001145"
/clone_lib="NYIZRP2"
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AU127370.1 GI:10952086
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Unpublished (2000)
Contact: Takao Isogai
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Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Ph.D., Ph.D., CDNA Library Preparation: M. Bento Soares, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NOI-C&PR clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL, send email to: info@lamage.llnl.gov
Seq primer: -40UP from Gibco
High quality sequence stop: 469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BG153412 678 bp mRNA linear EST 05-FEB-2001 nad34e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3367412 3' similar to SW:GLI3_HUMAN P10071 ZINC FINGER PROTEIN GLI3. [1] ;'
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Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 678)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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1934 ATGTGAAGACAGTGCCATGGCCCAGAGGCTCATGTCACCAAGAAGCAGCGAGGGGACATCC 1993
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                                                                                                            240 ATCCTGGCCGCCGCCGAGAGATTCCGGCAGCCATTCACAGTCCAGGTGCCTGGCC
                                                                                                                                                                                                       300 GACCGACTCAGGGAGCCCTTGGTGAGCAGCAGGACCTCAGCAACACTACCTCAAAAGCGGG
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                                                                                     1994 ATCCTCGGCCGCCACCCCGAGAGATTCCGGCAGCCATTCACAGTCCAGGTCGCCTGGCC
                                                                                                                                                                             2054 GACCGACTCAGGGAGCCCTTGGTGAGCAGCAGGACCTCAGCAACACTACCTCAAAGCGGG
                                                                                                                                                                                                                                                                     2114 AAGAATGCCTCCAGGTGAAAACCGTCAAGGCAGAGAGAAGCCAATGACATCTCAGCCAAGCC
                                                                                                                                                                                                                                                                                            360 AAGAATGCCTCCAGGTGAAAACCGTCAAGGCAGAGAAGCCAATGACATCTCAGCCAAAGCC
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BG153412
BG153412.1 GI:12665442
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Unpublished (1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCAATAGGCTTTAGGAAAAAAAGACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGA 4850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACGCCTCGGGCGTCCCCATTCCCAG-CGCTGTCCATGAGCACCACCAACATGGCTA
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                                                                             AAACCACCCTCTTTTAAA 5049
AAACCACCCTCTTTTAAA 1
                                                                                                                                                                TAAAGTATTCTAGGGAGAAACTGTCTTCCATTTCAGTTTTGAATCAGTATTGTTACACTC
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/db_xref="taxon:9606"
/clone="IMAGE:3367412"
/clone_lib="NCI_CGAP_Lu24"
/tissue_type="carcinoid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             clones made from the same library (cloneIDs 1414920-1417991 and 1520904-1522439). Subtraction by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Organ: lung; Vector: pT7T3D-Pac (Pharmacia) with modified polylinker; Plasmid DNA from the normalized library NCI_CGAP_LU5 was prepared, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 to the property of the driver was PCR-amplified cDNAs from a pool of 5,000 to the property of the driver was PCR-amplified cDNAs from a pool of 5,000 to the property of the driver was PCR-amplified cDNAs from a pool of 5,000 to the property of the property o
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Best Local Similarity
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  4623 GAGCCCAAGTATCAGTTCAGAACCTTTCCCATAGCTCCTCCCGCCTCACCACGCCTCGGGC 4682
                                                            4563 GATTGACTTCGATGCCATCATAGACGATGGGGACCACTCCAGCCTGATGTCGGGGGCCCT 4622
                                                                                                                                                           4503 TGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGACAGCCATGACCTGGAAGGGGTACA 4562
                                                                                                                                                                                                                                          4443 AGACGCCAGCTGCCTACAGGGGACCAGCGCCAAAAACTCTGAGTTACTTTCCCCAGG 4502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                  681 AGGCGCCAGCTGCCTACAGGNGACCAGCGCCAAAAACTCTGAGTTACTTTCCCCAGG
                                                                                                                      TGCTAATCAGGTGACAAGCACAGTGGACAGCCTCGACAGCCATGACCTGGAAGGGGTACA
                                                                                                                                                                                                                                                                               610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tissue Procurement: Dr. Jose Mercuende
cDNA Library preparation: Dr. M. Bento Soares, University of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soulinea.edu
The following repetitive elements were found in this cDNA
sequence: 61-83, >AT_rich#Low_complexity (matched compliment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BQ447085 694 bp mRNA
UI-H-EU1-bad-g-19-0-UI.sl NCI_CGAP_Ctl Ho
UI-H-EU1-bad-g-19-0-UI 3', mRNA sequence.
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EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumor Gene Index
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                                                                                                                                                                                                                                                                                                                                                                                  174
                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         was constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="Organ: Knee; Vector: p7773-Pac (Pharmacia) with a modified polylinker; Site_1: EcoR I; Site_2: Not INCI CGAP Ctl is a normalized cDNA library containing the following tissue(s): Osteoarthritic Cartilage The library
                                                                                                                                                                                                                                                                                                                                                                              TAG_SEQ=TGATCACGCT"
138 c 171 g
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/tissue_type="Osteoarthritic Cartilage"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:9606"
/clone="UI-H-EU1-bad-g-19-0-UI"
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                                                                                                                                                                                                                                                                                                  11.8%;
99.5%;
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_CGAP_Ctl Homo sapiens cDNA clone
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4471 AGCGCCAAAAACTCTGAGTTACTTTCCCCCAGGTGCTAATCAGGTGACAAGCACAGTGGAC 4530
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Sequencing Center information can be
                                                Project (CGAP),
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                        we22h03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3341877 3' similar to gb:M57609 GLI3 PROTEIN (HUMAN);, mRNA sequence.
                                                                     Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D.,
Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                           EST
                                                                                                                           Contact: Robert Strausberg, Ph.D.
                                                                                                                                               Unpublished (1997)
                                                                                                                                                                 Tumor
                                                                                                                                                                              National Cancer Institute, Cancer
                                                                                                                                                                                             NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
                                                                                                                                                                                                                                                                                        numan
                                                                                                                                                                                                                                                                                                                          AI796831.1
CDNA Library Preparation: M. Bento Soares, Ph.D. CDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Clone distribution: NCT-CGAP clone distribution
                                                                                                                                                             Gene Index
                                                                                                                                                                                                                                                                                                                          GI:5362294
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REFERENCE AUTHORS

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 576)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. National Cancer Institute, Cancer Genome Anat

Anatomy Project (CGAP),

TITLE JOURNAL

SOURCE

ORGANISM

Homo sapiens human. BE221252.1

KEYWORDS ACCESSION

VERSION

GI:8908570

RESULT 13 BE221252/c

DEFINITION LOCUS

BE221252
576 bp mRNA linear EST 03-JUL-;
hu22f05.xl NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3170817
similar to gb:M57609 GLI3 PROTEIN (HUMAN);, mRNA sequence.
BE221252

03-JUL-2000 :3170817 3'

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142

GGGAGAAACTGTCTTCCATTTCAGTTTTGAATCAGTATTGTTACACTCAAACCACCCTCT 5042

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TAGGAAAAAAAGACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGACTT

TGTTTTGGCTGTTTTTTTAGTTCTGTATGTATTTTAGCAATCTCATCTCACCTAACTGAG

4922 263

203

TGTTTTGGCTGTTTTTTAGTTCTGTATGTATTTTAGCAATCTCATCTCACCTAACTGAG

GTTCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGCTT 4802

GTTCTTTGCTGACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGCTT

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442

ORIGIN

Query Match Best Local

Similarity

11.1%; 99.5%;

Length 576;

Conservative

Matches

BASE COUNT

156

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118

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144 g

156

ct

N others

Вþ

322

COMMENT

Unpublished (1997)
Contact: Robert Strausberg, Ph.D.

Tumor Gene Index

FEATURES

info@image.llnl

gov

primer: -40UP from Gibco quality sequence stop: 4

404.

Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can

Washington University

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R.
Tissue Procurement: Chris Moskaluk, M.D., Ph.D. Life
Emmert-Buok, M.D., Ph.D. cDNA Library Preparation: Life
Technologies, Inc. cDNA Library Arrayed by: Christa Prange,
I.M.A.G.E. Consortium DNA Sequencing by: Washington Univers:

source

/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:3170817"
/clone_lib="NCI_CGAP_Mel15"
/tissue_type="malignant melanoma,

metastatic

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Site_1:

Oligo SalI;

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Site_2:

/lab_host="DH10B"

/note="Organ: skin; Vector: pCMV-SPORT6;
Site_2: NotI; Cloned unidirectionally. I
Library constructed by Life Technologies

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52
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                           TCTTCCATTTCAGTTTTGAATCAGTATTGTTACACTCAAACCACCCTCTTTT 5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGACAAGCACAGTGGACAGCCTCGACAGCCATGACCTGGAAGGGGTACAGATTGACTTCG 4573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NTGCTACAGGGGACCAGCGCCAAAAACTCTGAGGTTACTTCNNNCAGGTGCTAANTCAGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGCTTCAGTCAGCCAGACAGAAAGGNCTGGTTCATTTCTATNNTCAGACGCAGCCTGCC
                                                                                                                                              TTATATTCCTTTTATGGAAAAGGACTCTGAAAAACCCTAAAGTATTCTAGGGAGAAACTG 4993
                                                                                                                                                                                                                                                                   GACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGACTTTGTTTTTGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGCTTTAGGAAAAAAA 4813
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                                                                                                                                                                                                                                                                                                                                                          GACTGCAACCAACGGAAATCAATAGGAGTTGAAGAGATTAAACTGACTTTGTTTTGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTCCCTAGCGGAAGAAAGCAAATTCCTTGCAGTTATGCAATAGGCTTTAGGAAAAAAA
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/db_xref="taxon:9606"
/clone="IMAGE:2341877"
/clone_lib="NCI_CGAP_Lu24"
/tissue_type="carcinoid"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="Organ: lung; Vector: pT7T3D-Pac (Pharmacia) with modified polylinker; Plasmid DNA from the normalized library NCI_CGAP_LU5 was prepared, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 to the property of the property of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       clones made from the same library (cloneIDs 1414920-1417991 and 1520904-1522439). Subtraction by Bento Soares and M. Fatima Bonaldo. "
139 c 161 g 170 t 10 others
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95.2%;
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Pred. No. 4.4e-114;
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REFERENCE
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ORGANISM
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Matches 565; Conserv
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   4713 GCACCACCAACATGGCTATCGGGGACATGAGTTCTTTGCTGACCTCCCTAGCGGAAGAAA
                                                                                                                                  GGACCACTCCAGCCTGATGTCGGGGGCCCTGAGCCCAAGTATCATTCAGAACCTTTCCCA 4652
                                                                                                                                                                                                                                                                    TAGCTCCTCCCGCCTCACCACGCCTCGGGCGTCCCTCCCATTCCCAG-CGCTGTCCATGA
                                                                              TAGCTCCTCCCGCCTCACCACGCCTCGGGCGTCCCTCCCATTCCCAGTCGCTGTCCATGA 4712
                                                                                                                   GGACCACTCCAGCCTGATGTCGGGGGCCCTGAGCCCAAGTATCATTCAGAACCTTTCCCA
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Location/Qualifiers
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1 (bases 1 to 573)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D.
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Seq primer: -40UP from Gibco
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                                                                                                                                                                                                                                                                                                                                                                                                                                  pool 1: 723720^{-}/20320^{-}, Soares and M. Fatima Bonaldo." 117 ^{\circ} 145 ^{\circ} 154 ^{\circ} t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 5 libraries. The pools consisted of the following libraries and cloneIDs: Soares NbHSF pool 1: 309384-310919, 333208-325895 Soares NPSF pool 1: 145032-147335, 147720-148103, 148872-149255, 15002 - 150407, 151176-152327 Soares NDHFR-9W pool 1: 758280-760583, 772104-774407 Soares NbHPA pool 1: 304776-306311, 320136-322823, 326280-32663 Soares NBHOT pool 1: 723720-726407, 739080-740999 Subtraction by Bento
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Version
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                                                               Indels
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; EARLIER FILING DATE: 1996-07-18; NUMBER OF SEQ ID NOS: 17; SOFTWARE: PatentIn Ver. 2.0; SEQ ID NO 13; SEQ ID NO 13; LENGTH: 69; TYPE: DNA; ORGANISM: Homo sapiens US-09-043-303-13
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                                                                                                                                                                                                                                                                                                                   Sequence 10, Application US/08240049B
PATENT NO. 5686339
GENERAL INFORMATION:
APPLICANT: Reyes, Gregory R.
APPLICANT: Tam, Albert W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 78
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Best Local
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APPLICANT: SAMPEI, Kazujiro
APPLICANT: SAMPEI, Kazujiro
TITLE OF INVENTION: Method for Diagnosing Spinocerebellar Alaxia Type
TITLE OF INVENTION: Primers Therefor
FILE REFERENCE: 0760-0241P
CURRENT APPLICATION NUMBER: US/09/043,303
CURRENT FILING DATE: 1998-05-18
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NUMBER OF SEQ ID NOS: 17
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                   SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                        NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genelabs Technologies, Inc.
STREET: 505 Penobscot Drive
                                                                                                                                                                                                                                                                     APPLICANT: Reyes, Gregory R.
APPLICANT: Tam, Albert W.
APPLICANT: Yarbough, Patrice O.
TITLE OF INVENTION: Hepatitis E Virus Peptides and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2586 CAACAGAAGGGACAGCACCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTC 2645
                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                     STREET: 505 Penobso
                                                                                                                                    ZIP:
                                                                                                                                                    COUNTRY:
 APPLICATION NUMBER:
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Similarity 66.7%;
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                                                                                             Floppy disk
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US/08/240,049B
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Pred. No. 1e+03;
0; Mismatches
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Pred. No. 9.8e+02;
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US-09-043-303-13

Sequence 13, Application US/09043303 Patent No. 6251589 GENERAL INFORMATION:

APPLICANT: TSUJI, Shoji
APPLICANT: SANPEI, Kazujiro
TITLE OF INVENTION: Method for Diagnosing Spinocerebellar Alaxia Type
TITLE OF INVENTION: Primers Therefor
FILE REFERENCE: 0760-0241P

2 and

CURRENT APPLICATION NUMBER: US/09/043,303 CURRENT FILING DATE: 1998-05-18 EARLIER APPLICATION NUMBER: PCT/JP96/0199

PCT/JP96/01999

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2586 CAACAGAAGGGACCAGCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTC 2645 

; ORGANISM: Homo sapiens US-09-043-303-11

SOFTWARE: PatentIn Ver. SEQ ID NO 11 LENGTH: 78

LENGTH: 78 TYPE: DNA

CURRENT APPLICATION NUMBER: US/09/043,303 CURRENT FILING DATE: 1998-05-18 EARLIER APPLICATION NUMBER: PCT/JP96/01999 EARLIER FILING DATE: 1996-07-18 NUMBER OF SEQ ID NOS: 17

Query Match Best Local :

Match 0.6%; Local Similarity 68.3%;

Conservative

0,

Score 29.6; DB 4; Pred. No. 4.3e+02; Mismatches

DB 4; 19;

Length 78; Indels

0;

Gaps

0,:

Matches

RESULT 1 US-09-043-303-11

ALIGNMENTS

Sequence 11, Application US/09043303 Patent No. 6251589 GENERAL INFORMATION:

APPLICANT: TSUJI, Shoji
APPLICANT: SANPEI, Kazujiro
TITLE OF INVENTION: Method for Diagnosing Spinocerebellar Alaxia Type 2 and
TITLE OF INVENTION: Pilmers Therefor
FILE REFERENCE: 0760-0241P

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995 996 997 998

Sequence Sequence Sequence

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US-09-605-785-63
US-09-352-616A-63
US-09-352-616A-63
US-09-352-616A-63
US-09-232-149A-63
US-08-643-7-99C-59
US-08-483-52BB-59
US-08-974-549A-660
US-08-451-7-21A-20
US-08-451-7-21A-20
US-08-485-246A-20
US-08-484-322-21
US-08-484-322-28
US-08-427-097-11
US-08-427-097-11
US-08-427-097-11
US-08-812-890-3
US-08-812-890-3
US-08-812-890-3
US-08-812-890-3
US-08-812-890-3
US-08-812-975-4
US-08-878-957-11
US-08-878-957-11
US-08-878-957-11
US-08-878-957-11
US-08-878-957-11
US-08-878-957-11
US-08-878-957-5
US-09-3465-355-21

Sequence Sequence Sequence

63, Appl 63, Appl 63, Appl 59, Appl 59, Appl 59, Appl 59, Appl 70, Appl 20, Appl 20, Appl 20, Appl 11, Appl 11,

Sequence Sequence Sequence

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US-08-542-634-12
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Patent No.
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
TELEPAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                               TELEFAX: (415) 324-096
INFORMATION FOR SEQ ID NO:
                                                                                 NAME: Fabian, Gary R.
REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 4600-0293.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Fuerst, Thomas R. APPLICANT: McAtee, C. Patrick APPLICANT: Yarbough, Patrice O. APPLICANT: Zhang, Yifan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: DI
HYPOTHETICAL: NO
ORIGINAL SOURCE:
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                 SEQUENCE CHARACTERISTICS:
LENGTH: 99 base pairs
                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: HEPATITIS E VIRUS ANTIGENS AND USES THEREFOR NUMBER OF SEQUENCES: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3091 TCCGAGGCCTGCCCTGCCTCGTGTGCCGCGC 3123
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                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 350 Caml
                                                                                                                                                                                                CLASSIFICATION: 435
                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INDIVIDUAL ISOLATE: Hepatitis E Virus (Mexico strain) INDIVIDUAL ISOLATE: 406.4-2 region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
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nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                   USA
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BER: 38,615
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Pred. No. 1.6e+03;
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US-08-477-292-12
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APPLICANT: Fuerst, Thomas
APPLICANT: McAtee, Patrick
APPLICANT: Yarbough, Patric
                                                                                                                                                                     TELEFAX: (415)368-070
                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 99 base pairs
                                                                                                                                                                                                TELEPHONE: (415)369-9500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Hepatitis E Virus Antigens and Methods NUMBER OF SEQUENCES: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3091 TCCGAGGGCCTGGCCTGCCTGTGCCGCGC 3123
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                                              ORIGINAL SOURCE:
                                                             HYPOTHETICAL:
                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                INDIVIDUAL ISOLATE: INDIVIDUAL ISOLATE:
                                                                                          TOPOLOGY:
                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                               NAME: Brookes, Allan A
REGISTRATION NUMBER: 31
                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
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52; Conserv
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                                                                                                                  nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 505 Penobscot Drive
                                                                                                                                                                                      (415)368-0709
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Zhang, Yifan
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                                                                          DNA (genomic)
                                                                                                          double
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55.9%;
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            Hepatitis E Virus (Mexico strain) 406.4-2 region
                                                                                                                                                                                                                                                                                                                us/08/327,952
                                                                                                                                                                                                                                                                                                                                                                            us/08/477,292
                                                                                                                                                                                                                                                 36,373
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Pred. No. 1
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1.6e+03;
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Query Match

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Score 27.4;

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Length 99;

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 Sequence 26, Applia Patent No. 6277622
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Matches 52; Conservative
                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                               Query Match
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ZIP: 94306-U850
COMPUTER READABLE FORM:
COMPUTER EIDM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415) 324-09 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                           3031 CAGCCGCACGATGCGCCTGGGCCCACGGCGTGAGGGGCCCAGCGACCCGGTGCGGACAGGC 3090
                                                                                                                                                                                                                                                                                                                                  ORIGINAL SOURCE:
INDIVIDUAL ISOLATE:
INDIVIDUAL ISOLATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Fablan, Gary R.
REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 460
                                                                                                                                          3091 TCCGAGGGCCTGGCCTGCCTCGTGTGCCGCGC 3123
                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
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LENGTH: 99 base pairs
                                                                                                                                                                                                                                                                                                                                                                                      HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
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ADDRESSEE: Dehlinger & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
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                                                                                                        67 GTCGCCGACCTGCCACAGCCGGGGGCTGCGGCGC
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                   Application US/09242095
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (415) 324-0880
415) 324-0960
                                                                                                                                                                                                                                                                                                                                                                                      NO
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                                                                                                                                                                                                                                                             0.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        55.9%;
                                                                                                                                                                                                                                                                                                                                Hepatitis E Virus (Mexico strain) 406.4-2 region
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                                                                                                                                                                                                                                                             Score 27.4; DB 5; Pred. No. 1.6e+03;
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0; Mismatches 41
                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                               DB 5;
                                                                                                                                                                                                                                                                          Length 99;
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Best Local Similarity
These 39; Conserva
                                                                                                                                                                                                                                                                                                                                US-09-242-095-13/c
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                                                                                                                                                                                                                                                                                            ; Sequence 13, Application US/09242095
; Patent No. 6277622
                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Weiss, Anthony Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                      3473 GCCAGCAGTTCCATGCCCTCGAGCAGCCCTGCCCCGAGGGCAAAACCGACCTGCCC 3531
                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
CURRENT APPLICATION DATA:
                                                                                                                                                                                                       NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL:
ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 96 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 61 2 9957 5944
TELEFAX: 61 2 9957 6288
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Weiss, Anthony Steven TITLE OF INVENTION: SYNTHETIC POLYNUCLEOTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 61
              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                     CITY: NORTH SYDNEY
STATE: NEW SOUTH WALES
                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                               29 GGCAGGAGTGCCATTCCCAGGAGTAACGCGGACGGACGGCAGGAAGTCGGAGGTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Kurts, ANN D
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
                                                                                                                      COUNTRY:
                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: AU PFILING DATE: 09-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
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                                                                                                                                                                       LEVEL 8, 168 WALKER STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: GRIFFITH HACK
LEVEL 8, 168 WALKER STREET
                                                                                                                      AUSTRALIA
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                PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                       GRIFFITH HACK
                                                                Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single
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Pred. No. 1.9e+03
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                Version #1.30
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Length 96 Indels

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Gaps

0,

Copied from PCTUS2003092 on 04-03-2004

PRIOR APPLICATION DATA:

APPLICATION NUMBER: CLASSIFICATION: FILING DATE APPLICATION NUMBER:

**AU PO1565** 

US/09/242,095

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Gaps
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RESULT 11
US-08-556-978B-67/c
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                               Sequence 67, Application US/08556978B Patent No. 6268169
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                    SEQ ID NO 10
LENGTH: 75
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 10, Application US/09043303 Patent No. 6251589
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: TSUJI, Shoji
APPLICANT: SANPEI, Kazujiro
APPLICANT: SANPEI, Kazujiro
TITLE OF INVENTION: Method for Diagnosing Spinocerebellar Alaxia Type 2 and
TITLE OF INVENTION: Primers Therefor
FILE REFERENCE: 0760-0241P
CURRENT FILING DATE: 1988-05-18
CURRENT FILING DATE: 1988-05-18
                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: PCT/JP96/01999
EARLIER FILING DATE: 1996-07-18
NUMBER OF SEQ ID NOS: 17
                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: other nucleic acid DESCRIPTION: /desc = "synthetic oligonucleotide" HYPOTHETICAL: YES
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 61 2 9957 5944
TELEFAX: 61 2 9957 6288
TELEX: AA 26547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 09-AUG-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                              2586 CAACAGAAGGGACAGCGCCCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCCCC 2645
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TITLE OF INVENTION:
                APPLICANT: FAHNESTOCK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75 GGCAGGAGTGCCCATTCCCAGGAGTAACGCGGACGGGACGGCAGGAGGTGCCC 17
                                                                                                                                                             Local Similarity 66.1 es 39; Conservative
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STRANDEDNESS: single
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                                                                                                                                                                                                                              39;
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NOVEL RECOMBINANTLY PRODUCED
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                STEPHEN F.
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                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                   Score 26.4; DB 4;
Pred. No. 2.4e+03;
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                                                                                                                                                                                                                                                                    Length 75;
                                                                                                                                                                                                                                    Indels
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US-08-556-978B-68
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FILING DATE: JUNE 15, 193
ATTORNEY/AGENT INFORMATION:
NAME: FLOYD, LINDA AXAMETHY
REGISTRATION NUMBER: 33,692
REFERENCE/DOCKET NUMBER: CR-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-8112
                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: E. I. DU PONT DE NEMOURS AND COMPANY STREET: 1007 MARKET STREET
                                                                                                                                                                                                                                                                               APPLICANT: FAHNESTOCK, STEPHEN F.
TITLE OF INVENTION: NOVEL RECOMBINANTLY
TITLE OF INVENTION: SPIDER SILK ANALOGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2569 ACTATGCTGAACATGCTCAACAGAAGGGACAGCGCCAGCACCATCAGCTCGGCCTAC 2628
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LENGTH: 93 base pairs
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CURRENT APPLICATION DATA:
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                   CURRENT APPLICATION DATA:
                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: DISKETTE, 3.50 INCH
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                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                               ZIP:
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OPERATING SYSTEM: MICROSOFT WINDOWS 95
SOFTWARE: MICROSOFT WORD FOR WINDOWS 95
                                 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: MICROSOFT WINDOWS 95
SOFTWARE: MICROSOFT WORD FOR WINDOWS 95
                                                                                                                                                                                       CITY: WILMINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29 CAGGCCACC 21
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                                                                                                                                                  COUNTRY:
APPLICATION NUMBER:
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EDNESS: single
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                                                                                                                                                  UNITED STATES OF AMERICA
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                                                                                                                                                                                                                                                                                                   NOVEL RECOMBINANTLY PRODUCED
                                                                                                                                                                                                                                                                107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/556,978B
US/08/556,978B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 25.8; DB 4;
Pred. No. 3.6e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 93;
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2569 ACTATGCTGAACATGCTCAACAGAAGGGACAGCAGCGCCAGCACCATCAGCTCGGCCTAC 2628
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; STRANDEDNESS: single; TOPOLOGY: linear; MOLECULE TYPE: CDNA
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                                                                                                                             US-08-556-978B-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                           Matches
                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 31,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%;
Best Local Similarity 59.7%;
                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/077,60
PILING DATE: JUNE 15, 1993
ATTORNEY/AGENT INFORMATION:
NAME: FLOYD, LINDA AXAMETHY
REGISTRATION NUMBER: 33,692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: MICROSOFT WORD FOR WINDOWS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,978B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: LV..
STREET: MILMINTON
CITY: WILMINTON
STATE: DELAWARE
TUITED
2670 CAGCCGC 2676
                                                                                                                                      TOPOLOGY: li
                                               2610 CACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCCTCCTCAGGGATCTCGCCCTGCTTCTC 2669
                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: DISKETTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2622 GCCTACCTGAGCAGCCGCCCCCTCCTCAGGGATCTCGCCCTGCTTCTCCAGCCGCCGCTC 2681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2682 CAGCGAGGCGTC 2693
                                                                                                                                                                                                                  TELEPHONE: 302-773-0164
                         22 CACCTTGACCTGCGCCGCCGCAGCAGCAGCGCTGCACCTTGCACCTTGTCCACCTCGAC 81
                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: SOFTWARE: MICROSO
                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63 CGCCGAGACGTC 74
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                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GGTCCACCTGACCCTCCGCCAGGCCGGCGACGACTTCTCCCGCCGCCTACCCGCCGACTT 62
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                                                                                                                                                                          nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08556978B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1007 MARKET STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FAHNESTOCK, STEPHEN F.
VENTION: NOVEL RECOMBINANTLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UNITED STATES OF AMERICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                         Conservative
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                                                                                                                                                      linear
                                                                                                                                                                                                                                           302-892-8112
                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISKETTE,
                                                                                                                                        DNA (genomic)
                                                                                                                                                                 single
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                                                                                     0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SPIDER SILK ANALOGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PONT DE NEMOURS AND COMPANY
                                                                                                                                                                                                                                                                                                                                   08/077,600
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.50 INCH
                                                                                                                                                                                                                                                                     CR-9389-A
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Pred. No. 3.9e+03;
0; Mismatches 29
                                                                       Score 25.4; DB 4;
Pred. No. 4.5e+03;
0; Mismatches 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29;
                                                                                                Length 90;
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                                                                         Indels
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                                                                         0;
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US-08-556-978B-68

MOLECULE TYPE:

TOPOLOGY: STRANDEDNESS:

linear

DNA (genomic) single INFORMATION FOR SEQ ID NO:

SEQUENCE CHARACTERISTICS LENGTH: 93 base pairs

TYPE: nucleic acid

REFERENCE/DOCKET NUMBER: CR TELECOMMUNICATION INFORMATION: TELEPHONE: 302-892-8112 TELEPHONE: 302-773-0164

ATTORNEY/AGENT INFORMATION: PRIOR APPLICATION DATA:
APPLICATION NUMBER: 0
FILING DATE: JUNE 15,

08/077,600

CLASSIFICATION:

NAME: FLOYD, LINDA AXAMETHY REGISTRATION NUMBER: 33,692

33,692

CR-9389-A

Matches Best Query Match

9

Local Similarity

0.5%;

Score 25.8; DB 4; Pred. No. 3.6e+03;

Length 93; Indels

0;

Conservative

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US-08-405-702A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/08405702A Patent No. 5789389 GENERAL INFORMATION:
                                                                                                                       CURRENT AFFLICATION NIMBER: US/08/4U3,/J.
APPLICATION NIMBER: US/08/4U3,/J.
FILING DATE: 17-MAR-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5789389nan, Kevin E
NAME: NO. 5789389nan, S. 303
                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
SEQUENCE CHARACTERISTICS:
                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 312-715-1000
                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Roninson, Igor B
TITLE OF INVENTION: BCL2 Derived Genetic Elements Associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2629 CTGAGCAGC 2637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: with Sensitivity to Chemotherapeutic Drugs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69
                                     TELEPHONE: 312-715-1234
                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGCCACC 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                     Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 South Wacker Drive, Suite 3000
                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schott, Brigitte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tarasewicz, Dariusz G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Holzmayer, Tatiana A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Banner & Witcoff, Ltd
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                                                                                                                 95,332
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US-08-556-978B-30/c
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                                                                                                                                                                                                                RESULT 16
                                                                                                                                                        Sequence /,
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6268169
GENERAL INFORMATION:
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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/077,600
FILING DATE: JUNE 15, 1993
ATTORNEY/AGENT INFORMATION:
NAME: FLOYD, LINDA AXAMETHY
REGISTRATION NUMBER: 33,692
REFERENCE/DOCKET NUMBER: CR-9.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-8112
TELEPAX: 302-773-0164
                                                                                                                                             GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 302-773-0164
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                  TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                      2670 CAGCC 2674
                                                                                                                                                                                                                                                                                                                                                           2610 CACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCCTCCTCAGGGATCTCGCCCTGCTTCTC 2669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: FAHNESTOCK, STEPHEN F.
TITLE OF INVENTION: NOVEL RECOMBINANTLY PRODUCED
                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                      APPLICANT:
                                                                                     APPLICANT:
 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: DISKETTE, 3.50 INCH
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: MICROSOFT WINDOWS 95
                                                                                                                                                                                                                                                                                                                                          66 CACCTTGACCTGCGCCGCCGCAGCAGCAGCGGCTGCACCTTGCACCTTGTCCACCTCGAC 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: MICROSOFT WORD FOR WINDOWS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: WILMINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
                                                                                                                                                                                                                                                                     6 CGGCC 2
                                                                                                                                          INFORMATION:
                                                                                                                                                            7, Application US/08039778B
5. 5436137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: E. I. DU PONT DE NEMOURS AND COMPANY
1007 MARKET STREET
                                                                 Spindel, Eliot R.
Vijayaraghavan, Srinivasan
Nagalla, Srinivasa R.
Li, Kang
                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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              DNA SEQUENCE WHICH PEPTIDE CAPABLE OF ACROMSOME REACTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       107
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                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 25; DB 4; Pred. No. 5.5e-10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CR-9389-A
                             PROMOTING
                                                  ENCODES
                                                                                                                                                                                                                                                                                                                                                                                                           DB 4; Length 90; 5.5e+03; hes 25; Indels
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Best Local Similarity
Matches 47; Conserv
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 41, Application US/08556978B
                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,
                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: MICROSOFT WINDOWS 95
SOFTWARE: MICROSOFT WORD FOR WINDOWS 95
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 107
CORRESPONDENCE ADDRESS:
ADDRESSEE: E. I. DU PONT DE NEMOURS AND COMPANY
STREET: 1007 MARKET STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                    APPLICANT: FAHNESTOCK, STEPHEN F.
TITLE OF INVENTION: NOVEL RECOMBINANTLY PRODUCED
TITLE OF INVENTION: SPIDER SILK ANALOGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2355 AAACCCGGCAGGGACCAAATGGAT 2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2295 CCCAATCATGGACTCAACCATTTCCACTGCAACCACAGCCCTTGCTTTGCAAGCCAGGAG 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (C. 200154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PS/
OPERATING SYSTEM:
                                                                                                                                                                                                               STREET: 1007 MAR. CITY: WILMINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84 CCCCATTAAGTGCCCTGGTATTCCCAAGCAGCCCTGCCCACTTGCATGGCAAGACAGAAG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00537/068002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 07/919,731 FILING DATE: 27 July, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24 ACACCTGGCCCTTTTCACAAGCAT 1
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                APPLICATION NUMBER: FILING DATE:
                                                                                                                       MEDIUM TYPE:
                                                                                                                                                                             COUNTRY:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                           No. 6268169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02110-2804
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                                                                                                                                                                                            DELAWARE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IBM PS/2 Model 50Z or 55SX SYSTEM: MS-DOS (Version 5.
                                                                                                                                                                             UNITED STATES OF AMERICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                 US/08/556,978B
                                                                                                                         3.50 INCH
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Pred. No. 6e+03;
0; Mismatches 37;
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INFORMATION FOR SEQ ID NO:

132:

TELEFAX:

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US-08-053-131-132
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Best Local Similarity
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CITY: San Francisco
STATE: California
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                      REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 14643-9-3
TELECOMMUNICATION INFORMATION:
                                                                            FILING DATE: 18-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
                                                                                                                                                                                                                                  CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
FILING DATE: 16-DEC-1992
                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew STREET: One Market Plaza, Steuart Tower, Suite 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 5661016-Human Anima
TITLE OF INVENTION: Producing Heterologous Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2915 AGA 2917
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LENGTH: 66 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
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                                                                                                                                                           PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/053,131 FILING DATE: 26-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65 CAGCTGCTGCCCTGGGCCCGCTGCCGCTGCCGCAGAACCTGGGCCGGATGGCCCGGG 6
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                                                                                                                                                                            APPLICATION NUMBER: US 07/810,279 FILING DATE: 17-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 33,692
REFERENCE/DOCKET NUMBER: CR
                                                                                                                                     APPLICATION NUMBER:
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5661016
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Pred. No. 6.1e+03;
0; Mismatches 24
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 Matches
                 Query Match
Best Local 9
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                                                                                                                                               TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Trans
TITLE OF INVENTION: Produ
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LENGTH: 72 base pairs
TYPE: nucleic acid
                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
                                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/904,068
FILING DATE: 23-JUN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
RECTETRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 800 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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                                                                         MOLECULE TYPE:
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Local Similarity 60.6%;
nes 40; Conservation
                                                                                        TOPOLOGY: lin
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OPERATING SYSTEM:
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Local Similarity
les 40; Conserv
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                                                                                                                                                                                                                                         REGISTRATION NUMBER:
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o. 5719032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94111-3834
                                                                                                                   nucleic acid
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                                                                                                                                    72 base pairs
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 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        William M. Smith
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             0.5%;
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                                                                                                                                                                                                                                       30,223
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Score 24.4; DB 1;
Pred. No. 7e+03;
0; Mismatches 26;
                                                                                                                                                                                                                           14643-000913
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Pred. No. 7e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8th Floor
                                                                                                                                                                                                                                                                                                                                                                                           Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5719032-Human Animals for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26;
                           Length 72;
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Indels
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3986 GCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCTGGCTCACCAGCTCCTCGGCGACA 4045

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GENERAL

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RESULT 20
US-07-853-408B-132
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SEQUENCE CHARACTERISTICS:
LENGTH: 72 base pairs
TYPE: NUCLEIC ACID
TYPE: STORE STORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 132, Application US/07853408B Patent No. 5789650
                                                                                                             Sequence 132, Application US/08096762 Patent No. 5814318
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: lin
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 5789650-Human Anime
TITLE OF INVENTION: Producing Heterologous Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                    APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Trans
TITLE OF INVENTION: Produ
                                                                                                                                                                                                                                                          4046 GCATGC 4051
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     NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US FILING DATE: 19920318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: William M. Smith STREET: One Market Plaza, Steuart Tower, Suite 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCATGC 4051
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                                                                                                                                                                                                                     GCATCC 72
                                                                                                                                                                                                                                                                                              GCGAGCAAATACTTCCAGCACTGGGGCCAGGGCACCCTTGGTCACCGTCTCCTCAGGGAGT 66
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                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
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                                                                                                                                                                                                                                                                                                                                                                                   0.5%;
                                     Transgenic No. 5814318-Human Animals for
                  Producing Heterologous
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                                                                                                                                                                                                                                                                                                                                                                                   Score 24.4; DB 1; Pred. No. 7e+03;
                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                    RESULT 22
US-08-308-865-132
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                                                                                                                                                                Sequence 132, Application US/08308865 Patent No. 5877397
                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                     GENERAL INFORMATION:
APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic
TITLE OF INVENTION: Producing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 415-326-2422 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/810,279
FILING DATE: 17-DEC-1991
CORRESPONDENCE ADDRESS:
ADDRESSEE: William M. Smith
STREET: One Market Plaza, S
                                                                                                                                                                                                                                                                                                               4046 GCATGC 4051
                                                                                                                                                                                                                                                                                                                                                                    3986 GCATGCAGAACCCAGGACCCAGTGGGACACGGGTACCTGGCTCACCAGCTCCTCGGCGACA 4045
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LENGTH: 72 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 415-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION: NAME: Smith, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
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                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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STATE: California
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nes 40; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/053,131 FILING DATE: 26-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
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                                                                                                                                                                                                                                                                             GCATCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JMBER: US 07/990,860
16-DEC-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single
                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%;
                                                                                        Transgenic No. 5877397-Human Animals for
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                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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     Steuart Tower, Suite 2000
                                                                         Heterologous Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                         26;
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Matches

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3986 GCATGCAGAACCAGGACCCAGTGGGACAGGGGTACCTGGCTCACCAGCTCCTCGGCGACA 4045
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                                                                                                                                             : Sequence 8, Application US/08039778B
: Patent No. 5436137
: GENERAL INFORMATION:
                                                                                                                                                                                                 RESULT 25
US-08-039-778B-8/c
                                                                                                                                                                                                                                                                                                                                                                                                       US-09-043-303-14
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                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 14
LENGTH: 57
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14, Applica Patent No. 6251589 GENERAL INFORMATION:
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Best Local
                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: TSUJI, Shoji
APPLICANT: SANPEI, Kazujiro
TITLE OF INVENTION: Method for Diagnosing Spinocerebellar Alaxia Type
TITLE OF INVENTION: Primers Therefor
FILE REFERENCE: 0760-0241P
CURRENT APPLICATION NUMBER: US/09/043,303
CURRENT FILING DATE: 1998-05-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EARLIER APPLICATION NUMBER: PCT/JP96/01999
EARLIER FILING DATE: 1996-07-18
NUMBER OF SEQ ID NOS: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 415-326-2422 INFORMATION FOR SEQ ID NO:
                             TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                     2593 AGGGACAGCAGCAGCACCATCAGCTCGGCCTACCTGAGCAGCCGCCGCTC 2645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 415-326-2400
CORRESPONDENCE ADDRESS:
                                                                              APPLICANT: Nagalla, Srinivasa APPLICANT: Li, Kang
                                                                                                            APPLICANT: Spindel, Eliot R. APPLICANT: Vijayaraghavan, Srinivasan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4046 GCATGC 4051
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                 NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Smith, William M. REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                  7
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                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
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                                             DNA SEQUENCE WHICH PEPTIDE CAPABLE OF
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                               ACROMSOME REACTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132:
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                                                                                                                                                                                                                                                                                                                                                  Score 24.2; DB 4;
Pred. No. 7.1e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
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                                                                ENCODES
                                               PROMOTING
                                                                                                                                                                                                                                                                                                                                                                  DB 4;
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RESULT 23
PCT-US92-10983-132
; Sequence 132, Application PC/TUS9210983
; GENERAL INFORMATION:

APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic Non-Human Animals for
TITLE OF INVENTION: Producing Heterologous Antibodies
NUMBER OF SEQUENCES: 152

CORRESPONDENCE ADDRESS:
ADDRESSEE: William M. Smith
STREET: One Market Plaza, Steuart Tower, Suite 2000

CITY: San Francisco

California USA

COUNTRY:

94105

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA: APPLICATION NUMBER: PC

SOFTWARE:

PatentIn Release #1.0, Version

PCT/US92/10983

FILING DATE:

19921217

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

Вþ Qy

67

GCATCC 72

4046 GCATGC 4051

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US-08-308-865-132 Query Match Best Local Matches

Local Similarity

0.5%;

Score 24.4; DB 2; Pred. No. 7e+03; O: Mismatches 26;

Length 72; Indels

40;

Conservative

0;

TOPOLOGY: 11

linear

DNA (genomic)

INFORMATION FOR SEQ ID NO:

TELEPHONE: 415-326-2400

415-326-2422

REGISTRATION NUMBER: 30,223 REFERENCE/DOCKET NUMBER: 14

14643-9-1-1

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ATTORNEY/AGENT INFORMATION: NAME: Smith, William M.

APPLICATION NUMBER: FILING DATE: 23-JUN FILING DATE:

23-JUN-

US 07/904,068

US/08/145,707

CLASSIFICATION: 800 PRIOR APPLICATION NUMBER:

FILING DATE: APPLICATION NUMBER:

CURRENT APPLICATION DATA:

COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

US/08/308,865

COMPUTER READABLE FORM:

94105

USA

San Francisco California

MEDIUM TYPE:

Floppy disk

SEQUENCE CHARACTERISTICS:

LENGTH: 72 base pairs
TYPE: nucleic acid
STRANDEDNESS: single

ADDRESSEE: Fisn & .... creet

Fish & Richardson

Massachusetts

U.S.A.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%;
Best Local Similarity 59.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/919,731
FILING DATE: 27 Jully, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00537/068002
TELEPHONE: (617) 542-5070
TELEPHONE: (617) 542-8906
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (617) 542-890
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                            APPLICANT: Reyes, Greyer, APPLICANT: Tam, Albert W.
APPLICANT: Yarbough, Patrice O.
APPLICANT: Yarbough, Patrice E Virus Peptides and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2295 CCCAATCATGGACTCAACCATTTCCACTGCAACCACAGCCCTTGCTTTTGCAAGCCAGGAG 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: MS-DOS (Version 5 SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA:
                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: TIM PC COMPOSITION
COMPUTER: TEM PC COMPOSITION
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2355 AAACCCGGC 2363
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                            STREET: 505 Penobsco
CITY: Redwood City
STATE: CA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69 CCCCATTAAGTGCCCTGGTATTCCCAAGCAGCCCTGCCCACTTGCATGGCAAGACAGAAG 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US
FILING DATE: 19930323
                   APPLICATION NUMBER: FILING DATE: 09-MAY
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CLASSIFICATION:
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                                                                                                                                                                    94063
                                                                                                                                                                                                                                           505 Penobscot Drive
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SYSTEM: MS-DOS (Version 5.0
                                                                    PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                             Genelabs Technologies, Inc.
                   09-MAY-1994
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                                 US/08/240,049B
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Pred. No. 7.7e+03;
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Best Local Similarity
                                                                                                                                      CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Fabian, Gary R.
REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 4600
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (415) 324-0960 INFORMATION FOR SEQ ID NO:
                                                                                     TELEFAX: (415) 324-0960 INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

-MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/542,634
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Yarbough, Patrice O. APPLICANT: Zhang, Yifan TITLE OF INVENTION: HEPATITIS E
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APPLICANT:
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HYPOTHETICAL: NO
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LENGTH: 99 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 99 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                          TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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TOPOLOGY:
                 STRANDEDNESS:
                                                  LENGTH:
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                                 nucleic acid
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350 Cambridge Ave., Suite
                                                99 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fuerst, Thomas R. McAtee, C. Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                                USA
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linear
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                 double
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Pred. No. 8.8e+03;
0; Mismatches 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      250
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US-08-477-292-11
                                                      US-08-477-292-11
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               Best
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   Matches
                             Query Match
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                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
HYPOTHETICAL: N
ORIGINAL SOURCE:
                                                                                           ORIGINAL SOURCE:
                                                                                                   TOPOLOGICAL: DN
                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (415)369-9500
                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
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               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 505 Penobscot Drive CITY: Redwood City
STATE: CA
                                                                 INDIVIDUAL ISOLATE: INDIVIDUAL ISOLATE:
                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                          REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67 GTCGTAGACCTACCACAGCTGGGGCCGCCGCC
                                                                                                                                          STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
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                                                                                                                                                                    LENGTH:
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               Similarity
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                                                                                                                                                 : 99 base pairs
                                                                                                                                                                                                                                                                  Brookes, Allan A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fuerst, Thomas
McAtee, Patrick
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  Conservative
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Zhang, Yifan
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                                                                                                                  DNA (genomic)
              53.8%;
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                                                               Hepatitis E Virus 406.4-2 region
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                                                                                                                                                                                                                                                         36,373
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              Score 24.2;
Pred. No. 8
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Pred. No. 8
  Mismatches
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              8.8e+03;
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                          DB 4;
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                                                                            strain)
                          Length 99;
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Gaps
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                                                               RESULT 30
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          Sequence 129, Application US/08053131 Patent No. 5661016 GENERAL INFORMATION:
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RESULT 29
PCT-US95-13703-11
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                                                                                                                                                      Query Match
                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                     NAME: Fablan, Gary R.
REGISTATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 46:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-6880
                           3091 TCCGAGGGCCTGGCCTGCTGTGCCGCGC 3123
                                                                                         3031 CAGCCGCACGATGCGCTGGGCCACGGCGTGAGGAGGGCCAGCGACCCGGTGCGGACAGGC 3090
                                                                                                                                                                                                                                    ORIGINAL SOURCE:
                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 99 base pairs
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                                                                                                                                                                                                                                                 HYPOTHETICAL:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                    INDIVIDUAL INDIVIDUAL
   67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: P.U. CTTY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                             TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
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                                                                                                                                          Local
                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                             7
GTCGTAGACCTACCACAGCTGGGGCCGCCGCCGC 99
                                                            CCGCCCGACCACTCGGCTCGCCTTGGCGTGACCAGGCCCAGCGCCCCGCCGTTGCCTCAC
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                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                               nucleic acid
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                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                linear
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                                                                                                                                                                                                                                                   NO
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                                                                                                                                                                                                                                                                                               double
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                                                                                                                                      0.5%;
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                                                                                                                                                                                                    Hepatitis E Virus 406.4-2 region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT/US95/13703
                                                                                                                        Score 24.2; D
Pred. No. 8.8e
0; Mismatches
                                                                                                                        0;
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APPLICANT:

Lonberg, Nils

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; MOLECULE TYPE: DNA (genomic) US-08-053-131-129
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US-08-645-641-129
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 415-326-2422 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 16-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/810,279
FILING DATE: 17-DEC-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            4004 CAGTGGGACAGGGGTACCTGGCTCACCAGCTCCTCGGCGACAGCATGC 4051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATE: 18-MAX. - NICONATION: ATTORNEY/AGENT INFORMATION: Smith, William M. 30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 5661016-Human Anim
TITLE OF INVENTION: Producing Heterologous Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA: application number: US 07/990,860
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                                                                                                                                         APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 5719032-Human Animals for
TITLE OF INVENTION: Producing Heterologous Antibodies
NUMBER OF SEQUENCES: 150
CORRESPONDENCE ADDRESS:
ADDRESSEE: William M. Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 415-326-2400
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                       COMPUTER READABLE FORM:
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TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/0 FILING DATE: 26-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/853,408 FILING DATE: 18-MAR-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Townsend and Townsend Khourie and Crew STREET: One Market Plaza, Steuart Tower, Suite 200
                                                                                                                                                                                                                                                                                                                                                                                                                                         22 CACTGGGGCCAGGGCACCCTGGTCACCGTCTCCTCAGGGAGTGCATCC 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
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MEDIUM TYPE: Floppy disk
                                          COUNTRY: USA
ZIP: 94111-3834
                                                                                                                            STREET:
                                                                                                    T: Two Embarcadero Center, 8th Floor San Francisco
                                                                                   California
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Pred. No. 8.5e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15;
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US-07-853-408B-129
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                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: Une .....
CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 150
CORRESPONDENCE ADDRESS:
ADDRESSEE: William M. Smith
STREET: One Market Plaza, Steuart Tower, Suite 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 5789650-Human Anima
TITLE OF INVENTION: Producing Heterologous Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4004 CAGTGGGACAGGGGTACCTGGCTCACCAGCTCCTCGGCGACAGCATGC 4051
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                        REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
                                                                  SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                y Match 0.5%;
Local Similarity 68.8%;
hes 33; Conservative
                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 199203 CLASSIFICATION: 800
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OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
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    LENGTH: 69 LL.
TENGTH: NUCLEIC ACID
TYPE: NUCLEIC ACID
TYPE: Sing
                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/07853408B
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                                               69 base pairs
                                                                                                           415-326-2422
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SYSTEM: PC-DOS/MS-DOS
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Pred. No. 8.5e+03;
0; Mismatches 15;
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US-08-096-762-129
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    Matches
                                   Query Match
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                                                                                                                                                    TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                FILLAN LALL.
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M. 223
                                                                                MOLECULE TYPE:
                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 415-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 0:
FILING DATE: 26-APR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 16-DEC-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: DNA (genomic) 7-853-408B-129
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                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie
STREET: One Market Plaza, Steuart Tower,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 5814318-
TITLE OF INVENTION: Producing Heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentTn Palanna "1"
                                                                                                TOPOLOGY:
                                                                                                           STRANDEDNESS:
                                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/810,279 FILING DATE: 17-DEC-1991
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                 госат
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les 33; Conserv
                 Similarity
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   Conservative
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                                                                              DNA (genomic)
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                0.5%;
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                Score 24; DB 1;
Pred. No. 8.5e+03;
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Pred. No. 8
Mismatches
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                             DB 1; Length 69;
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Suite 200
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PCT-US92-10983-129
; Sequence 129, Application PC/TUS9210983
; GENERAL INFORMATION:
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                                                                                                                      RESULT 35
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 415-326-2422 INFORMATION FOR SEQ ID NO:
APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Trans.
TITLE OF INVENTION: Product
                                                                                                                                                                                     4004 CAGTGGGACAGGGGTACCTGGCTCACCAGCTCCTCGGCGACAGCATGC 4051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,;
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 13
MOLECULE TYPE:
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APPLICATION NUMBER:
FILING DATE:
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MEDIUM TYPE: Floppy disk
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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nes 33; Conserv
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OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: San
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EDNESS: single
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One Market Plaza, Steuart Tower, Suite 2000
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     Producing
                      Transgenic Non-Human Animals
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Pred. No.
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     Heterologous
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CORRESPONDENCE ADDRESS

ADDRESSEE:

William M. Smith

NUMBER OF SEQUENCES:

152

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PCT-US92-10983-129
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                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Lonberg, Nils
APPLICANT: Kay, Robert M.
TITLE OF INVENTION: Transgenic No. 6255458-Human Anima
TITLE OF INVENTION: Producing Heterologous Antibodies
NUMBER OF SEQUENCES: 421
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LENGTH: 69 base pairs
TYPE: NUCLEIC ACID
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422
                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
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ADDRESSEE: Townsend and Townsend and Crew LLP
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MOLECULE TYPE:
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                                                                     PRIOR APPLICATION DATA:
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CITY: S
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CLASSIFICATION:
                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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                                                   APPLICATION NUMBER:
                                                                                        APPLICATION NUMBER: US 07/810,279 FILING DATE: 17-DEC-1991
                                                                                                                                           CLASSIFICATION:
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                                    FILING DATE:
                    APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                        Two Embarcadero Center, Eighth Floor
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                                    18-MAR-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transgenic No. 6255458-Human Animals for
                                                                                                                                                                                                               Release #1.0, Version
                                                       US 07/853,408
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   US 07/904,068
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Pred. No.
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                                                                                                       RESULT 37
US-08-758-417A-97
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                                                     Patent No. 6300129
GENERAL INFORMATION:
                                                                                          Sequence 97,
                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                  Query Match
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INFORMATION FOR SEQ ID NO:
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PRIOR APPLICATION NUMBER: US 08/728,463
FILING DATE: 10-OCT-1996
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PRIOR APPLICATION UNIMBER: US 08/161,739
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FILING DATE: 01-DEC-1997
ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: DNA
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                                                                                                                                                                                                                                       0.5%;
Local Similarity 68.8%;
les 33; Conservation
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                                                                                                                                                                             25 CACTGGGGCCAGGGCACCCTGGTCACCGTCTCCTCAGGGAGTGCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 014643-009040US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: WO PCT/US96/16433 FILING DATE: 10-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 00 FILING DATE: 10-OCT-1995
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Kay, Robert M. TITLE OF INVENTION: Transgenic No.
                                  APPLICANT: Lonberg, Nils
                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Apple,
                                                                                          Application US/08758417A
                                                                                                                                                                                                                                                                                                                                                                                                             72 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (415)
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22-JUL-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 08/758,417
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pred. No. 8.7e+03;
pred. No. 8.7e+13;
   6300129-Human Animals
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SEQUENCE DESCRIPTION: SEQ ID NO: US-08-758-417A-97
                                                                                                                                                                     US-08-405-702A-5
                                                                                                                                                                                                  RESULT 38
                                                           Sequence 5, Application US/08405702A Patent No. 5789389
GENERAL INFORMATION:
APPLICANT: Tarasewicz, Dariusz G
                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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           APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                4004 CAGTGGGACAGGGGTACCTGGCTCACCAGCTCCTCGGCGACAGCATGC 4051
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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STRANDEDNESS: single
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 10-OCT-1995
APPLICATION NUMBER: US 08/352,322
FILING DATE: 07-DEC-1994
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STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 72 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Serafini, Andrew T. REGISTRATION NUMBER: 41,303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/053,131 FILING DATE: 26-APR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/155,301 FILING DATE: 18-NOV-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 014643-009030US
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                                                                                                                                                                                                                                                                                                                                                                                         0.5%;
ilarity 68.8%;
Conservative
        Schott, Brigitte
Holzmayer, Tatia
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           Tatiana A.
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Pred. No. 8.7e
0; Mismatches
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Best Local Similarity
""hes 42; Conserv
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                                                                                                                                                                                                                                                                                                                             APPLICANT: Tarasewic APPLICANT: Schott, B APPLICANT: Holzmayer APPLICANT: Roninson, TITLE OF INVENTION:
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APPLICATION NUMBER: US/08,
APPLICATION NUMBER: US/08,
FILING DATE: 17-MAR-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5789389nan, Kevi
REGISTRATION NUMBER: 35,30
                                                                                                                                    STREET: LV -
CITY: Chicago
CITY: Illinois
                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatil
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                                                                                                                ZIP:
     OPERATING SYSTEM:
                                                                                                                                                                                                                                               ADDRESSEE:
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TOPOLOGY: lir
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CITY: Chicago
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                                                                                                             60606
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                                                                                                                                                                                                                   10 South Wacker Drive, Suite 3000
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Schott, Brigitte
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                                                                                                                                                                                                                                               Banner & Witcoff, Ltd.
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compatible
PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                             BCL2 Derived Gene
with Sensitivity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%;
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BCL2 Derived Genetic Elements Associated
with Sensitivity to Chemotherapeutic Drugs
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                                                                                                                                                                                                                                                                                                                                                       Derived Genetic Elements Associated
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Pred. No.
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                                                                                                                                                                                                                                                                                                                             to Chemotherapeutic
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US-08-476-176B-22/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22,
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Best Local Similarity
                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/127,721
FILING DATE: 27-SEPTEMBER-1993
APPLICATION NUMBER: US 07/952,802
FILING DATE: 25-SEPTEMBER-1992
ATTORNEY/AGENT INFORMATION:
NAME: NO. 5958708ak, Henry P.
REGISTRATION NUMBER: 33,200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: NO. 5789389nan, Kevin REGISTRATION NUMBER: 35,303 REFERENCE/DOCKET NUMBER: 95, TELECOMMUNICATION INFORMATION: TELEPHONE: 312-715-1000
                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                      STREET: 59 KC_
STREET: New Jersey
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LENGTH: 84 base pairs
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/405,702A
                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 5958708artis Patent Department STREET: 59 Route 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Saldanha, TITLE OF INVENTION: F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 33,200
REFERENCE/DOCKET NUMBER: 4-19276/A/P2/CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 277-5110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 17-MAR-1995
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 312-/15-12
TELEX: 910-221-5317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 312-715-1234
                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 07936-1080
                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       w
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58.3%; Pred. No. 9.2e+03;
rative 0; Mismatches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunoglobulin isotype 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Reshaped monoclonal antibodies against an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jose
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Job time : 140 secs
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                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 45; Conserv
                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (908) 277-4306
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                               LENGTH: 87 base pairs
TYPE: nucleic acid
STRANDENESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genon
                                                                                                                                                              2568 CACTATGCTGAACATGCTCAACAGAAGGGACAGCAGCAGCAGCACCATCAGCTCGGCCTA 2627
                                                                                                       2628 CCTGAGCAGCCGCCGCTCCT 2647
                                                                                                                                          87 CAGGCTGCTGATCAAGTACGCCAGCGAGAGCATCAGCGGCATCCCCAGCAGGTTCAGCGG 28
                                                                      27 CAGCGGCAGCGGCACCGACT 8
                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                             0.5%;
                                                                                                                                                                                                              0;
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Pred. No. 9.4e+03;
- M4 smatches 35;
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